

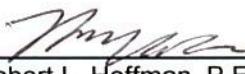
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**SITE CHARACTERIZATION, PERFORMANCE-BASED  
DISPOSAL PLAN,  
AND ALTERNATIVE DECONTAMINATION APPROVAL REQUEST  
PHILIP J. HOLTON WATER PURIFICATION PLANT  
SCITUATE, RHODE ISLAND**

Prepared for:  
**PROVIDENCE WATER SUPPLY BOARD**

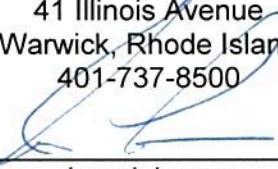
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## **1.0 INTRODUCTION**

On behalf of the Providence Water Supply Board, Hoffman Engineering, Inc. (HEI) in conjunction with RI Analytical Laboratories, Inc. (RIAL), has prepared this report which provides the results of PCB analyses of caulking utilized in the construction of some buildings at the subject Site. This report also provides the plan developed to address the identified polychlorinated biphenyl (PCB) Bulk Product Waste in accordance with 40 CFR 761.62(a)(2), as well as soils at concentrations above 1 part per million (ppm) impacted by the PCB Bulk Product Waste. This plan describes the results of Site characterization sampling, details of the proposed remediation and disposal methods, and defines the post-removal verification sampling strategy.

The subject Site is the treatment facility for the Scituate Reservoir which provides drinking water for approximately 60% of Rhode Island. A Site locus is provided as Figure 1.

## **2.0 BACKGROUND**

The subject Site facility is undergoing extensive renovations including the demolition of the building which houses the valving and filter media associated with the filter beds. This building is referred to as the Central Filter Gallery. In addition to the structural removal of the building, the filter beds themselves will be removed and disposed of. A Site plan depicting these features is provided as Figure 2. Photographs of the Site features are provided in Appendix 2.

### **2.1 BUILDING CONSTRUCTION DETAILS**

During the construction of the existing Central Filter Gallery Building, an aluminum clad exterior was placed on the outside of the masonry block wall. These aluminum clad panels interlock with overlapping seams. At the seams, a backer rod was placed and then caulked with a very pliable tan caulking. Similarly, the window openings were fitted with interlock panels and fixed windows, which do not open. These windows were placed within the panels and the window caulked from the outside. As such, the caulking does not touch the masonry block walls on any portion of the building nor within the window openings themselves. There is also no caulking applied within the interior of the windows nor where the metal clad panels meet the interior brick work.

There is also a single doorway leading from the Central Filter Gallery Building to the enclosed courtyard in which the eastern filter bed is located. This doorframe was also caulked on its exterior with similar caulking.

### **2.2 FILTER BED CONSTRUCTION DETAILS**

These underground structures consist of a concrete roof which is sloped to facilitate surface drainage. These concrete roofs are covered with soil. From the ground surface down these areas consist of approximately 3 inches of 1-1.5" rounded stone which was placed on a filter fabric beneath which is a 3-4 inch layer of medium sand overlying a 6-8 mil polyethylene liner and a thin layer of clay. Beneath this clay is common backfill situated on top of the

concrete reservoirs. Within the rounded stone were very few fines which necessitated the removal of the stones to allow adequate soil for analyses. These soils as well as all concrete beneath the soil will be disposed of off-site as part of the proposed renovation work.

As detailed later in this report, HEI/RIAL has conducted analyses of the soils adjacent to the side of the building (beneath windows and metal clad paneling) and found limited PCB impact, but levels were above the 1 mg/kg Self Implementing Clean-up Level. These soils will be disposed of as <50 ppm PCB containing waste in accordance with 40 CFR 761 guidelines.

Previous renovation work included the removal and recycling of similar metal cladding from the northern face of the Central Filter Gallery Building as well as the western face of the Central Operations Building. These surface soils were also analyzed with similar impacts found.

### **3.0 SITE CHARACTERIZATION METHODOLOGY**

During characterization activities, samples were collected from the following media: window caulking, door caulking, metal clad siding caulking, miscellaneous caulking, exterior concrete water proofing, concrete foundation, concrete equipment pad, and soil in accordance with appropriate sample collection techniques, analytical methods, and reporting procedures.

Characterization sampling was conducted to determine the nature and extent of PCBs originating from the exterior caulking and to verify the extent of contamination. Based on the construction methodology utilized for the metal cladding and the lack of any contact of the caulking and the building brick/concrete, the primary focus was on the underlying soil.

Caulking samples were collected by cutting small pieces of the material from around the window, panel, or door frame.

Concrete sampling was conducted to depths of  $\frac{1}{2}$ " using dedicated tools (e.g., masonry bits, chisels). The concrete was ground to a fine powder prior to analyses. After pulverizing the media, the material was placed into a sample container using a sterile and dedicated spoon at each sample location.

Soil sampling was conducted in accordance with generally accepted procedures for collecting surface soil for the purpose of environmental analysis. Small disposable hand trowels and stainless steel hand augers were used to collect soils from the specified depth. Soils were then homogenized, packaged, and shipped for analysis.

When samples were collected with hand tools, all reusable sampling equipment was decontaminated between each sampling event by scrubbing with biodegradable Alconox and wipes followed by a rinse. A new pair of clean nitrile gloves was used at each sampling location where gloves came in contact with sample media, including each decontamination event.

The samples were then transported on ice under a chain-of-custody to RIAL's laboratory in Warwick, Rhode Island. All samples were extracted using USEPA Method 3540C (Soxhlet Extraction) and analyzed for PCBs using USEPA Method 8082 in accordance with 40 CFR 761.

## **4.0 SITE CHARACTERIZATION ACTIVITIES**

### **4.1 CAULKING**

#### **4.1.1 Summary of Window Caulking Analytical Results**

HEI/RIAL collected a total of 16 samples over various Site visits in order to determine the consistency of the presence of PCBs in the window caulking. The analytical results provided in Appendix 3 ranged from nondetectable levels to 190,000 mg/kg (ppm). The reason for this large variability potentially could be from the re-caulking of windows over various time periods or due to large variability in the product. However, for the purposes of the remediation, the Owner will assume that all window caulking contains PCBs.

#### **4.1.2 Summary of Panel Caulking Analytical Results**

HEI/RIAL collected a total of 24 samples over various Site visits in order to determine the consistency of the presence of PCBs in the panel caulking. This caulking was utilized on the outer most portion of the panel on top of a backer rod which was first placed between the panels. The analytical results provided in Appendix 3 indicate a range of nondetectable levels to 3,500 mg/kg (ppm). The reason for this large variability potentially could be from the re-caulking of the panels over various time periods or due to large variability in the product. However, for the purposes of the remediation, the Owner will assume that all panel caulking contains PCBs.

#### **4.1.3 Summary of Door Caulking Analytical Results**

There exists a single door that leads from the Central Filter Gallery Building into the northwest corner of the courtyard area. This doorway, shown on Figure 3, was set within the metal cladding of the building, similar to the windows and similarly caulked. The analytical results of this material confirm it contains PCBs at a concentration of 2,800 mg/kg (ppm). A sample of the granite door sill, where the caulking meets the sill, was collected and analyzed. It was found not to contain PCBs.

A double door located on the north end of the Central Filter Gallery Building had a very thin bead of a hard grey caulking material, which was analyzed and found not to contain PCBs.

#### **4.1.4 Summary of Miscellaneous Caulking Analytical Results**

Limited areas of additional caulking use were observed on the building to be demolished/renovated. The materials identified included caulking around the access hatches to the underground filter beds, as well as the material used to caulk the expansion joint on the western side of the Central Operations Building. These materials had PCB levels ranging from 2 mg/kg (ppm) to 11 mg/kg (ppm). As such, these results indicate the material is not

regulated under 40 CFR 761. HEI/RIAL will be on-site during the disassembling of these access hatches to verify and test, as necessary, the presence of any additional caulking material. It is not prudent to do this at this time since these hatches lead to the active water purification tanks. In addition, any expansion joints containing exposed caulking following the exterior building panel removal will be further assessed and remediated if found to contain regulated levels of PCBs.

## **4.2 CONCRETE**

### **4.2.1 Summary of Concrete Sampling Analytical Results**

As previously discussed, the caulking utilized in the metal cladding of the building, including the window areas, does not come in contact with the bricks or masonry blocks of the building. Based on the overlap utilized in the installation, there is no potential for runoff from these panels to impact the walls of the buildings. There was, however, a slight potential that impacted rainwater could splash from the ground surface onto the adjacent foundation. In order to verify this impact, if any, HEI/RIAL collected 6 samples of the concrete with the results ranging from nondetectable to 0.7 mg/kg (ppm), all of which are below the 1 mg/kg (ppm) remedial criteria. This sampling included areas directly beneath windows, panel caulking joints, and the one portion of the foundation where the grade change exposes approximately 4' of foundation wall. These results are summarized on Table 4.

### **4.2.2 Summary of Building Waterproofing Analytical Results**

Limited areas of the exterior masonry block wall of the buildings were coated with a black mastic-type waterproofing material. These areas are limited to the southwest corner of the Central Filter Gallery and the northern face of the Central Filter Gallery, as well as the northern face connector of the Central Filter Gallery and the Central Operations Building. Three samples of this material were collected and analyzed for PCBs. The results indicate the material at the southwest corner of the Central Filter Gallery contains PCBs ranging from 1.1 to 28 mg/kg (ppm). As such, none of these levels are above the 50 ppm Bulk PCB Waste threshold. This material, which was manufactured for the purposes of waterproofing, was applied as part of the original building construction and has not been diluted or was not a result of a spill. As such, in accordance with EPA regulations, this product is exempt from TSCA regulations. However, these materials will be segregated and disposed of at a solid waste facility, rather than at a concrete recycling facility. If additional areas of waterproofing are encountered once the metal clad paneling is removed from the building, this material will be sampled and handled in a similar fashion, unless results exceed 50 mg/kg (ppm).

## **4.3 SOIL**

### **4.3.1 Drip Edge Soil Sampling**

On January 11, 2012, RIAL collected surface soil samples from across the drip area of six random window areas. These locations are shown on Figure 3 and correspond to the adjacent filter gallery number. These samples also correspond to previous window caulk sampling locations. Due to the limited fines (soil) between the round stones across the surface area,

these samples were collected in one-gallon ziplock bags. This large volume of samples provided the laboratory with an ample volume of soil for analysis.

The soils were collected over the area from the edge of the foundation wall out 4 inches and over a span of 48 inches (3 inches each side of the window). This area also represents the drip area of the metal clad siding. Dedicated disposable sampling trowels were utilized for each location. The samples were transported on ice and under a chain-of-custody to the laboratory for analyses. Samples were first sieved to remove all rocks above  $\frac{1}{4}$ " in size. All samples were extracted using USEPA Method 3540C (Soxhlet Extraction) and analyzed for PCBs using USEPA Method 8082 in accordance with 40 CFR 761. The results summarized in Tables 2A-2D range from < 0.1 to 1900 mg/kg (ppm). The location of the 1900 mg/kg sample was reanalyzed with a detected concentration of 10 mg/kg. It is unclear if the original sample had laboratory cross-contamination or is a result of a small piece of window caulking within the sample.

#### **4.3.2 Soil Impact Delineation Sampling**

On January 31, 2012, HEI/RIAL selected four random (three of which were previous drip edge soil sampling locations) locations to further assess the lateral and depth of impact from the PCBs. The selected locations, shown on Figure 3, were from Filter Area No. 3, Filter Area No. 11, Filter Area No. 12, and Filter Area No. 17. A rectangular area, as shown on Figure 4, was laid out beneath the window, extending 36 inches from the building by 48 inches wide. Along the sides of the rectangle, 9 inches away from the building, two samples were collected; No. 1 and No. 5. At 18 inches from the building, three samples were collected at even spacing across the 48 inch width. These samples were designated as No. 2, No. 3, and No. 4. An additional sample, designated as No. 6, was taken at the midpoint of the rectangle, 36 inches out from the building. A seventh sample was taken at the midpoint of the rectangle, 6 inches away from the building (No. 7). This distance was selected to allow ample room to utilize the hand auger which was necessary to collect deeper samples. Three discrete intervals were sampled at each location; 0-3" designated as Sample A, 3-5" designated as Sample B, and 5-12" designated as Sample C.

Upon receipt at the laboratory, an equal weight aliquot composite was created using Sample No. 1 and Sample No. 5. Similarly, a second composite was created using Sample No.'s 2, 3, and 4. Sample No. 6 and No. 7 were each kept separate as discrete samples. Note, Sample A from the No. 6 locations were not analyzed, and are assumed to have contained PCBs based on previous drip edge sampling and analyses.

The analyses of the shallow 0-3" samples (the "A Set") that are summarized on Tables 2A-2C, and are illustrated on Figure 4, indicate the presence of 0.3 to 16 mg/kg (ppm) at a distance of 9 inches away from the building. At 18 inches away from the building, the results ranged from 1.0 to 5.5 mg/kg (ppm). At 36 inches away from the building, the results ranged from 0.1 to 1.4 mg/kg (ppm).

Based on these results, the samples collected deeper (3-5" below grade) were analyzed at 6 inches and 18 inches away from the building. These results were all nondetectable at <0.1 mg/kg (ppm).

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#### **4.3.3 Former Drip Edge Soil Sampling**

Previously the southern face of the courtyard area east of the filter vault of the Central Filter Gallery was finished with similar paneling. In addition, the western face of the Central Operations Building also contains paneling and windows. Similar paneling was previously on the exterior along the northern face of the Central Filter Gallery and connector hallway leading to the Central Operations Building. As such, HEI/RIAL collected random surface soil samples in these areas to confirm the suspected similar PCB impacts. These samples were collected within three inches of the building (the former drip edge area) and at a depth of 0-3" below grade. The results, which are provided on Figure 4, indicate the presence of PCBs ranging from 0.4 to 25 mg/kg (ppm). As such, for the purposes of the remediation, these soils will be remediated in the same manner as those soils located beneath the existing windows and panels. A background soil sample from the upper three inches of material within the center of the courtyard area, east of the central filter gallery, was collected and analyzed for PCBs. No detectable PCBs were found (< 0.1 mg/kg (ppm)).

In addition, for characterization of the soil 0-4" above the filter fabric, in areas which are not anticipated to be remediated based on the distance from the building face (>4'), a composite sample for analyses was collected. This sample consisting of 18 aliquots, nine of which were from the soils above the western filter vault and nine from soils above the eastern filter vault, was analyzed for PCBs, 8 RCRA total metals, VOCs, polyaromatic hydrocarbons, and reactivity. None of these analytes exceeded the RIDEM Residential Direct Exposure Criteria. There were no detectable PCBs.

At the same aforementioned locations, the material from 4-10" below grade (first 6" below the filter fabric) was similarly analyzed. As with the upper 4" of material, this material did not exceed any of the RIDEM Residential Direct Exposure Criteria nor were there any detectable PCBs.

#### **4.3.4 Miscellaneous Soil Sampling**

There is a small concrete pad located adjacent to the north face of the Central Filter Gallery. This concrete pad, which is approximately 6 feet long, is slated for removal as part of the renovation work. To verify that it has not been impacted by the former panels, which were located above it, a composite sample of six half-inch deep concrete samples were collected along the drip line, composited, and analyzed for PCBs. No PCBs were detected in this sample.

### **4.4 METAL PANEL WIPE SAMPLING AND ANALYSES**

On March 12, 2012, HEI/RIAL conducted wipe sampling of two selected panels in which the caulking was previously found to contain elevated levels of PCBs. On each panel, two random 100 cm<sup>2</sup> areas were delineated. These areas were located one inch away from the caulk line. On each panel, one of the areas was left uncleansed and the other area cleaned utilizing diesel fuel on a rag. A hexane wipe sample was then collected from each of the two areas on both panels. The samples were then analyzed for PCBs and no detectable concentrations were found in any of the four samples (<1 ug/100 cm<sup>2</sup>). In addition, a blank sample accompanied the samples and was analyzed as a quality assurance quality control

sample with no detectable PCBs found. Based on these results, it does not appear that the PCBs have adversely impacted the panels themselves; however, verification sampling will be conducted during the remediation to confirm this.

## **5.0 PERFORMANCE-BASED DISPOSAL**

This plan has been developed for the remediation of PCB Bulk Product Waste and PCB-impacted bulk materials identified during the completed site characterizations. Throughout the implementation process and upon its completion, each step of the remediation will be evaluated to determine whether any plan modifications should be made prior to continuing with the remedy implementation in other areas. A general overview of the proposed remedial activities is presented below with detailed descriptions of the plan for each of the affected media presented in the following sections.

The remediation plan proposed below is a performance-based removal and off-site disposal of PCB Bulk Product Waste under 40 CFR 761.

### **5.1 REMEDIAL GOALS**

In summary, the portions of the building to be demolished or disturbed during the pending renovations that have identified PCB Bulk Product Waste associated with the caulking will be removed and disposed off-site as a >50 ppm PCB waste. This includes the entire window and the 1" perimeter around each metal panel. PCB-impacted bulk materials (soils) in these same areas which were characterized to contain concentrations of PCBs >1 ppm but <50 ppm will also be removed and disposed of as <50 ppm PCB waste.

### **5.2 PERFORMANCE-BASED DISPOSAL OF PCB BULK PRODUCT WASTE**

The identified PCB Bulk Product Waste will be removed for subsequent disposal using the following techniques:

#### **5.2.1 Panel and Window Removal**

Site preparation for caulking removal will include the placement of a double layer of polyethylene sheeting 5 feet wide along the edge of the building in which the panels and windows with the caulking will be removed. This sheeting will be weighted down with bricks or similar items to prevent movement if an unexpected wind gust were to occur. Note, all work will be conducted on precipitation free days and with sustained winds of less than 10 mph. Based on the characteristics of the caulking, it is not brittle and is very pliable and sticky and as such dust is not considered to be a significant concern. In addition, the paint present on the panels is a baked on enamel and will not chip off of the panels during removal. The purpose of the polyethylene sheeting is to minimize the potential for any large strips of caulking from falling onto the underlying soils.

Prior to the start of work, to prevent concrete dust from entering the building, each window enclosure will be sealed with a layer of polyethylene sheeting on the inside, and then the opening covered with plywood from the inside. This polyethylene sheeting and plywood will

remain in place during the demolition of the building.

The panels and windows will be disassembled starting from one end of the building and working progressively in one direction. The panels are easily disassembled (unbolted) from one another when this progressive approach is utilized. As the panels are removed, they will be wrapped in polyethylene sheeting and moved to a central location for cutting described below. As windows are removed, including the adjacent metal cladding, these will be wrapped in polyethylene sheeting and placed directly in a lined hazardous waste type roll-off for off-site disposal. Any caulking that falls onto the polyethylene sheeting will be picked up and the area HEPA vacuumed as work proceeds. Dedicated personnel, those working on the polyethylene sheeting and those working off the sheeted area, will be utilized to prevent tracking of any caulking materials off the polyethylene sheeting. Personnel removing the panels and caulking will wear PPE including respirators, tyvek suits, and gloves.

### **5.2.2 Door Removal**

The door frame and the surrounding caulking, including the metal cladding, will be removed, wrapped, and placed in the aforementioned lined roll-off. A wipe sample in accordance with the same procedures utilized on the metal panels discussed below will be collected from the exterior of the door to verify concentrations of PCBs are less than 10 ug/ 100 cm<sup>2</sup> to verify that the door can be sent to a scrap metal facility. The Contractor will then install a suitable temporary door to provide access to this area.

### **5.2.3 Cutting of the Panels**

Based on the wipe testing completed as part of the Site Characterization, the PCBs have not impacted the panels themselves. As such, to significantly reduce disposal costs, the portion of the panel containing the caulking will be removed utilizing a cut-off saw. The cut will be made approximately 1 inch from the outer edges of the panels. The remaining strip containing the PCB caulking will be wrapped in a double layer of polyethylene sheeting in bundles for disposal as PCB >50 ppm Bulk Waste. The remainder of the panel will be placed in a lined covered roll-off for disposal as scrap aluminum pending wipe sample confirmation results. This work will be conducted at a central location and within a fully reinforced poly enclosure kept under negative pressure utilizing a high efficiency particulate air (HEPA) filtration system capable of trapping 99.97% of all particulates  $\geq$  0.03 micrometers. This unit shall provide a minimum of four exchanges per hour. This enclosure system shall consist of three totally enclosed chambers separate from each other. Entry to and exit from all decontamination enclosure system chambers shall be through curtain doorways consisting of two layers of overlapping polyethylene sheeting. One sheet shall be secured at the top of the left side, the other sheet at the top and right side. Clean room shall be sized to adequately accommodate the work crew. Postings shall be located in this area. Lighting, heat and electricity shall be provided as necessary for comforts, (fluorescent lights work best because they produce little heat thereby reducing the danger of melting poly). This space shall not be used for storage of tools, equipment, or materials or as office space. The entire decontamination enclosure shall be constructed over a frame. The decontamination unit should be covered with opaque polyethylene for privacy. A load-out portion of the enclosure will allow materials to be transferred in and out of the enclosure without personnel leaving the enclosure. A Proposed Decontamination Enclosure System Plan is provided as Figure 6.

Procedures for entering and exiting this work space will be as follows:

- All workers and authorized personnel shall exit the work area through the worker decontamination enclosure system.
- Personnel working in the cutting area shall wear protective equipment including tyvek suits and respirators and shall proceed to the work area, which shall be located contiguous to the decontamination chamber.
- Before leaving the work area, all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet wiping procedures (small HEPA vacuums with brush attachments may be utilized for this purpose, however, larger machines may tear the suits).
- Personnel shall proceed to the equipment room where they shall remove all protective equipment, except respirators. Deposit disposable clothing into appropriately labeled containers, and proceed to take a cleansing shower utilizing soap and shampoo.
- Reusable contaminated footwear shall be stored in the equipment room when not in use in the work area (upon completion of the project rubber boots may be decontaminated for reuse).
- Water shall be made available in the equipment room for cleaning purposes. Workers shall clean the outside of the respirators and exposed face area under running water prior to removal of respirator.
- After drying off, workers shall proceed to the clean room and remove respirators. Personnel delivering panels for cutting will not pass beyond the shower area and will handoff these items to the workers within the containment. Likewise the wrapped cutoff portions of the panels will be passed from the enclosure to personnel to place them in the lined disposal roll-off.

Any debris generated during the panel cutting from within the enclosure will be collected periodically and at a minimum at the end of each work day and double bagged in polyethylene bags for off-site disposal as >50 ppm PCB bulk waste. After their use, disposable PPE and any poly sheeting utilized to collect debris or generated while working in the cut-off area will be placed in the appropriate containers for disposal as >50 ppm PCB bulk waste.

At the completion of the project, any non-disposable equipment and tools used during removal and disposal activities will be decontaminated in accordance with 40 CFR Subpart S. All removed caulking and associated debris will be transported off-site for disposal as >50 ppm PCB waste in accordance with 40 CFR 761.62(a). While stored on-site these roll-offs will be marked in accordance with 40 CFR 761.40 and stored in accordance 40 CFR 761.65.

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HEI/RIAL will document and monitor all aspects of the removal and remedial work including documenting the appropriate negative pressure of the containment work area and the proper handling of all debris.

#### **5.2.4 Confirmation Panel Wipe Testing**

In accordance with 40 CFR 761 Subpart P, a wipe sample will be collected from a randomly selected panel at a frequency of 10% of the overall panel surface area. Based on the estimated 8000 sq. ft. of panels, which is comprised of approximately 800 linear feet by 10 feet high, there is approximately 750 m<sup>2</sup>. In accordance with 40 CFR 761.302(a)(ii), ten percent of the surface area of panels will be subjected to wipe testing. As such, one panel following the removal of edges will be randomly chosen for every 10.5 linear feet of panel area removed. Because this will result in a minimum of 75 wipe sample analyses, if after the initial 10 samples are analyzed, the frequency of sample collection will be reduced to one sample per 100 linear feet of panel removal. For the panels selected for wipe testing, the random selection of halves utilizing 40 CFR 761.306 will be utilized to obtain a random 10 cm by 10 cm area to collect the wipe sample in accordance with 40 CFR 761.123. The wipe samples will be analyzed in accordance with 761.272 with the results reported in ug/100 cm<sup>2</sup>. If these results indicate, as anticipated, that the wipe sample concentrations do not exceed the 10 ug/100 cm<sup>2</sup> criteria, they will be disposed of as standard scrap metal. If analytical results show levels exceeding this threshold, the waste will be disposed of in accordance with PCB bulk waste rather than as scrap metal. In addition to the primary wipe samples described above, duplicates and field blanks will be collected at a frequency one per twenty primary samples. These samples will be submitted to the laboratory as part of the *QA/QC* procedures.

#### **5.2.5 Remediation of PCB-Impacted Soils**

Consistent with the findings of the completed site characterization and the extent of contamination defined therein, soils adjacent to the building areas to be demolished will be removed and disposed of as described below. In addition, soils located adjacent to the portion of the building which previously had similar windows and panels during prior renovation work will be removed and disposed of. These areas are shown on Figure 5.

Prior to the start of work, the existing down spout leaders shall be extended a minimum of 6 feet from the building by attaching a PVC pipe connected to the existing pipe with a “Fernco” type coupling. The purpose of this is to keep the runoff out of the excavation area. The soils adjacent to the building, including soils beneath the windows and caulked metal paneling, as well as other portions of the building which previously had similar items, will be remediated as follows. These areas are depicted on Figure 5:

- Utilizing an appropriate rake or shovel, the soil above the geotextile fabric at a distance of 4' from the building will be placed into small piles (kept within this 4' wide area). These piles will then be placed in a wheel barrow or buckets and moved to a central location within the 4' work area, where they will be vacuumed into a vacuum dumpster connected to a vacuum truck. This vacuum dumpster shall be suitable for direct shipment to the disposal facility without transfer and shall be equipped with appropriate HEPA filters so as to prevent the contamination of the vacuum truck or discharge of particulate into the air.
- In order to minimize the potential for the fines on top of the geotextile from impacting the underlying soil, the following procedures will be conducted. Once the soils overlying the geotextile are containerized, half the width of the geotextile closest to the building will be

rolled back away from the building. The geotextile will then be cut at the 4 foot mark and the outer 2' folded back toward the building. The geotextile will then be bagged for off-site disposal as PCB solid waste (<50 mg/kg). Extreme care will be taken not to release dust and impact otherwise clean soils. This material will be placed in a covered dumpster while awaiting disposal.

- The Contractor will then utilize a tineless type rake (e.g., concrete type), or a similar hand piece of equipment, to remove the 3-4 inches of soil located on top of the polyethylene sheeting. This soil will be stockpiled in small piles and vacuumed into the roll-off.
- The polyethylene sheeting and clay layer which adheres to it will then be cut, rolled up and bagged, and disposed of as solid waste at Central Landfill in Johnston, Rhode Island. This material will be placed in a covered dumpster while awaiting disposal.
- At the completion of the project, any non-disposable equipment and tools used during removal and disposal activities will be decontaminated in accordance with 40 CFR Subpart S.
- Air monitoring at the perimeter of the active PCB-impacted soil removal areas will be conducted during active soil removal. To reduce dust levels and exposures to dust, a combination of engineering controls and personal protective equipment will be implemented during work activities.
- All workers will follow applicable Federal and State regulations regarding the work activities, including but not limited to OSHA regulations, respiratory protection, personal protective equipment, etc.
- Prior to any work, the boundaries of the excavation area will be marked and properly secured. The excavation contractor will obtain a permit for Dig Safe.
- Access to the active work areas will be controlled through temporary construction fencing. In the case of the courtyard area, access to this area will be restricted by way of the one access door.
- Water misting will be used as a dust suppressant, as appropriate.

Excavated soil will be stored in lined, vacuum-type roll-offs that are DOT-approved containers. These roll-offs will be marked as PCB Impacted Soil <50 mg/kg (ppm). Non-disposable equipment and tools will be decontaminated following the procedures described in 40 CFR Subpart S. Disposable equipment and decontamination materials will be containerized for off-site disposal.

## 5.2.6 Post-Removal Verification Soil Sampling

Verification sampling of the soil excavation base, sidewalls, and adjacent areas will be conducted in accordance with 40 CFR 761 Subpart O as follows:

- Sidewall samples: Samples will be collected from outer edge (north if the removal operation is proceeding south to north) of each excavation sidewall such that each sample every 10 liner feet. This will result in approximately 115 samples from the 1,150 linear feet of sidewall. Due to the limited soil available (note the soil material is primarily stones, the sample will be collected over the entire excavation depth (6-7"). The large stones, >1/4" in size will be kept out of the sample. Each sampling location will be marked with a flag with the sample designation number.

In order to reduce the analytical cost, five successive sidewall samples will be composited in the laboratory in accordance with 40CFR 761 Subpart O. The original samples will be retained for additional analyses should they become necessary. Based on the compositing of the five samples, the remedial criteria will be  $\leq 0.2$  mg/kg (e.g., one fifth of the  $\leq 1$  mg/kg High Occupancy Criteria). In the event that the composite sample exceeds this number, but is less than 5 mg/kg, the Owner may elect to conduct additional remediation and resample or analyze each of the samples individually. In the event that the samples are consistently just slightly above 0.2 mg/kg, the Owner may elect to run all samples as individual analyses.

Base samples: In accordance with 40 CFR 761 Subpart O Confirmation Sampling Grid Layout, a typical grid is 1.5 meters by 1.5 meters. Based on the 4' wide excavation area, this would result in an equivalent 6' long rectangle to meet the same approximate surface area. Due to the potential for the highest concentrations to be along the drip edge of the panels, the samples will be collected within the first 3 inches away from the building wall. In order to reduce analytical cost, as with the sidewall, five successive sampling grid points at 6', 12', 18', 24', and 30' will be composited in the laboratory in accordance with 40 CFR Subpart O. Each sampling location will be flagged with the sample identification number. The individual samples will be retained for additional analyses should they become necessary. Based on the compositing of the five samples, the remedial criteria will be  $\leq 0.2$  mg/kg (e.g., one fifth of the  $\leq 1$  mg/kg High Occupancy Criteria. In the event that the composite sample exceeds this number, but is less than 5 mg/kg, the Owner may elect to conduct additional remediation and resample or run each of the samples individually. In the event that the samples are consistently just slightly above 0.2 mg/kg, the Owner may elect to analyze all samples as individual analyses.

In the event that soil samples do not pass the post remediation verification sampling criteria of  $\leq 1$  mg/kg (ppm) additional soils will be removed and additional post verification samples will be collected until the less than  $\leq 1$  mg/kg (ppm) criteria has been achieved.

All samples will be transported to the laboratory under standard Chain of Custody procedures, extracted using USEPA Method 3540C (Soxhlet extraction), and analyzed for PCBs using USEPA Method 8082.

In addition to the primary verification samples described above, duplicate and field equipment blank samples will be collected at a frequency of one per twenty primary samples. These samples will be submitted to the laboratory as part of the *QA/QC* procedures associated with sample collection.

## **6.0 ACTION LEVELS**

Analytical results from the verification samples will be evaluated to determine whether or not this task is complete as follows:

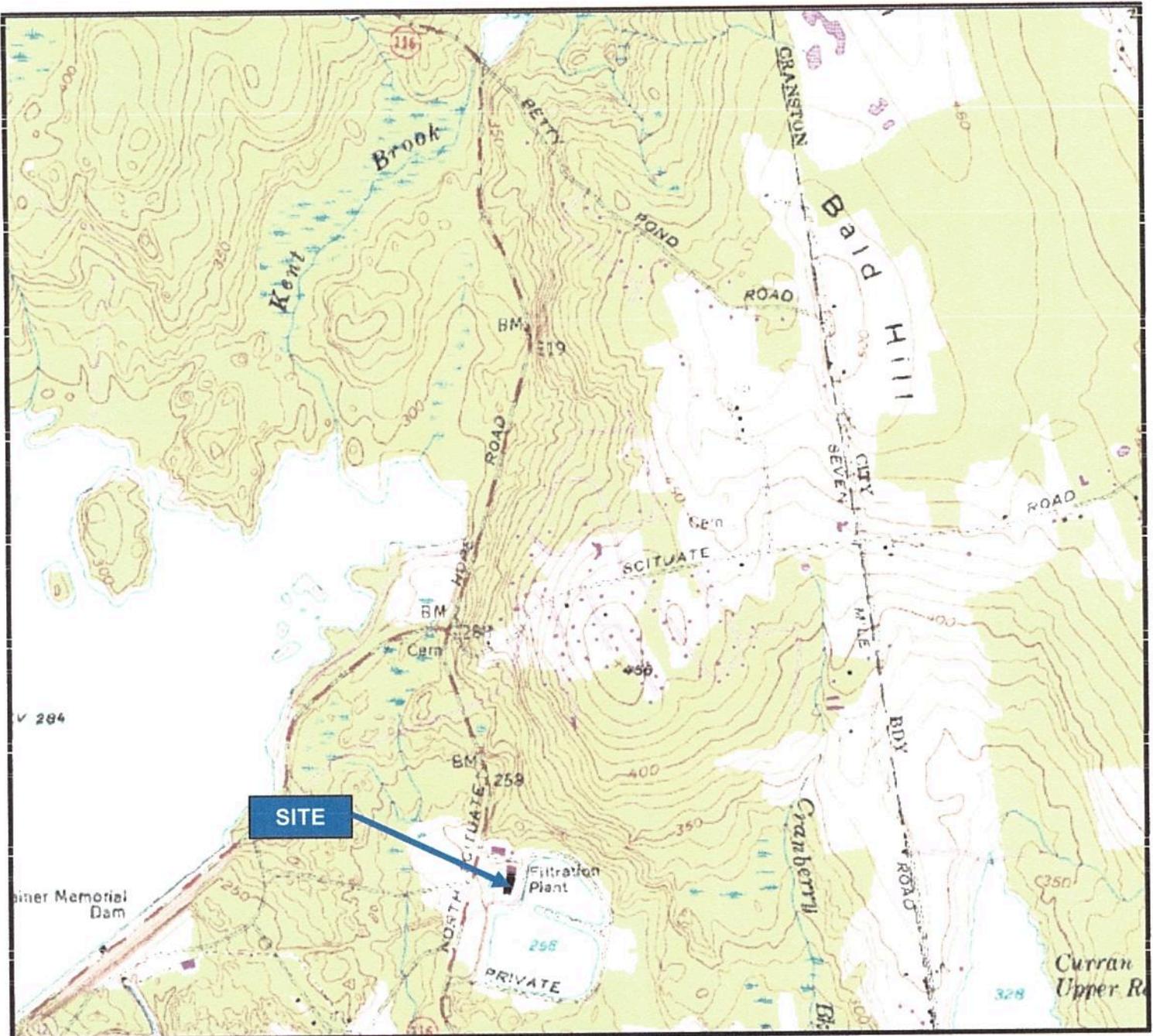
- Analytical results less than 1 ppm -task complete; no additional clean up required and/or no disposal restrictions will apply to the underlying or adjacent materials.
- Analytical results greater than 1 ppm -additional removal and off-site disposal as <50 ppm PCB remediation waste will be conducted and sampling process repeated until the levels are met.

## **7.0 RECORDKEEPING AND REPORTING**

The Owner shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the decontamination and the analytical sampling shall be established and maintained by the Owner in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of the EPA.

The Owner shall submit a final report to the EPA within 60 days of completion of the approved plan. At a minimum, this report shall include: a short narrative of the project activities; characterization and confirmation sampling analytical results, including indoor air sampling results; copies of the accompanying analytical chains of custody; field and laboratory *QA/QC* checks; an estimate of the quantity of PCB waste disposed of and the size of the decontaminated area(s); copies of manifests; and, copies of certificates of disposal or similar certifications issued by the disposer.

## FIGURES



**HEI**

HOFFMAN ENGINEERING, INC.  
640 Ten Rod Rd.  
North Kingstown, RI 02852

### LOCUS MAP

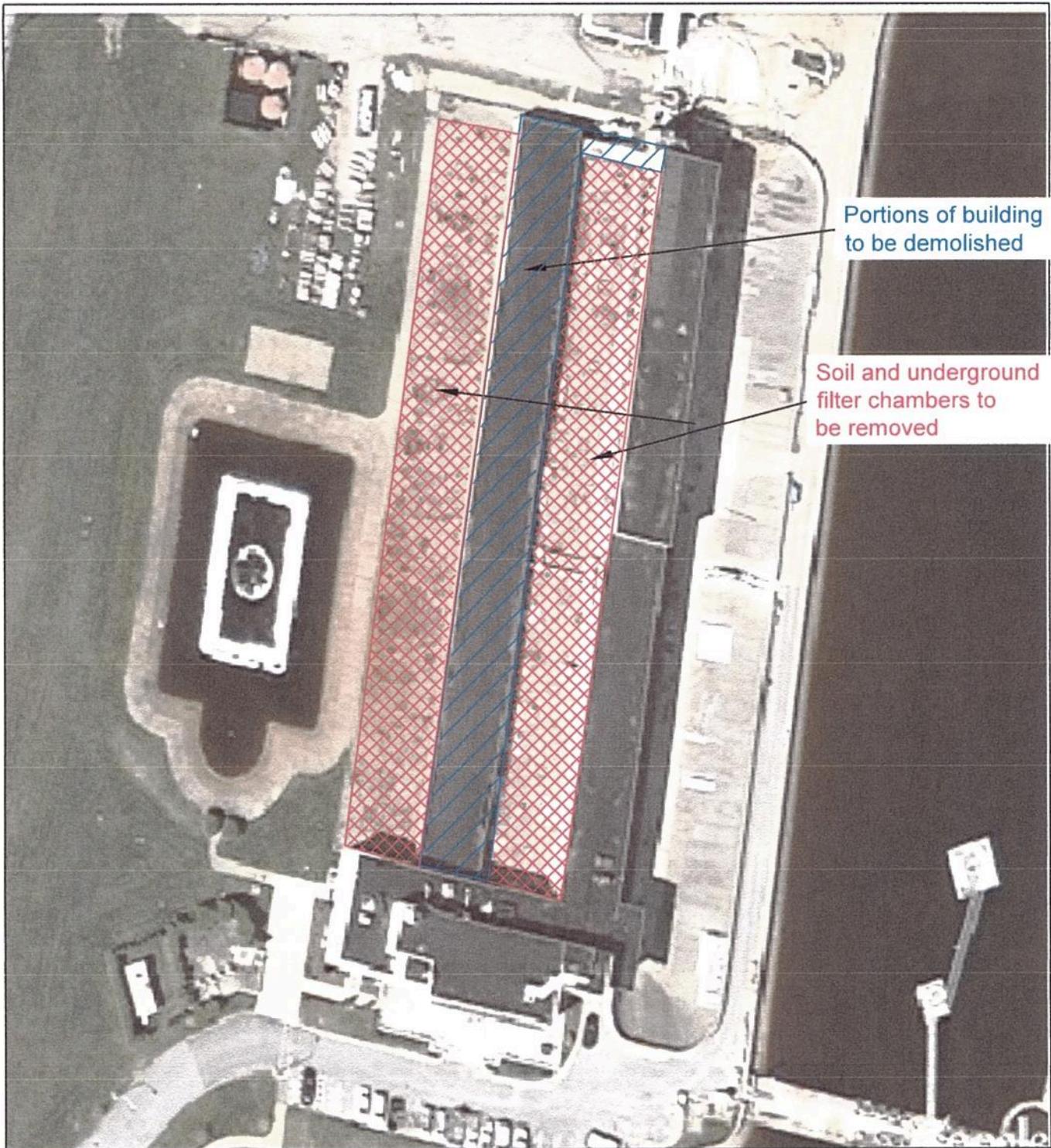
PHILIP J. HOLTON PURIFICATION PLANT  
SCITUATE, RHODE ISLAND

Date: 3/29/12

By: MMA

Base USGS Quad:  
North Scituate, RI  
(photorevised 1975)

NTS  
**FIGURE 1**



**HEI**

HOFFMAN ENGINEERING, INC.  
640 Ten Rod Rd.  
North Kingston, RI 02852

### Site Plan

Proposed Demolition Plan

PHILIP J. HOLTON PURIFICATION PLANT  
SCITUATE, RHODE ISLAND

Date: 4/5/12

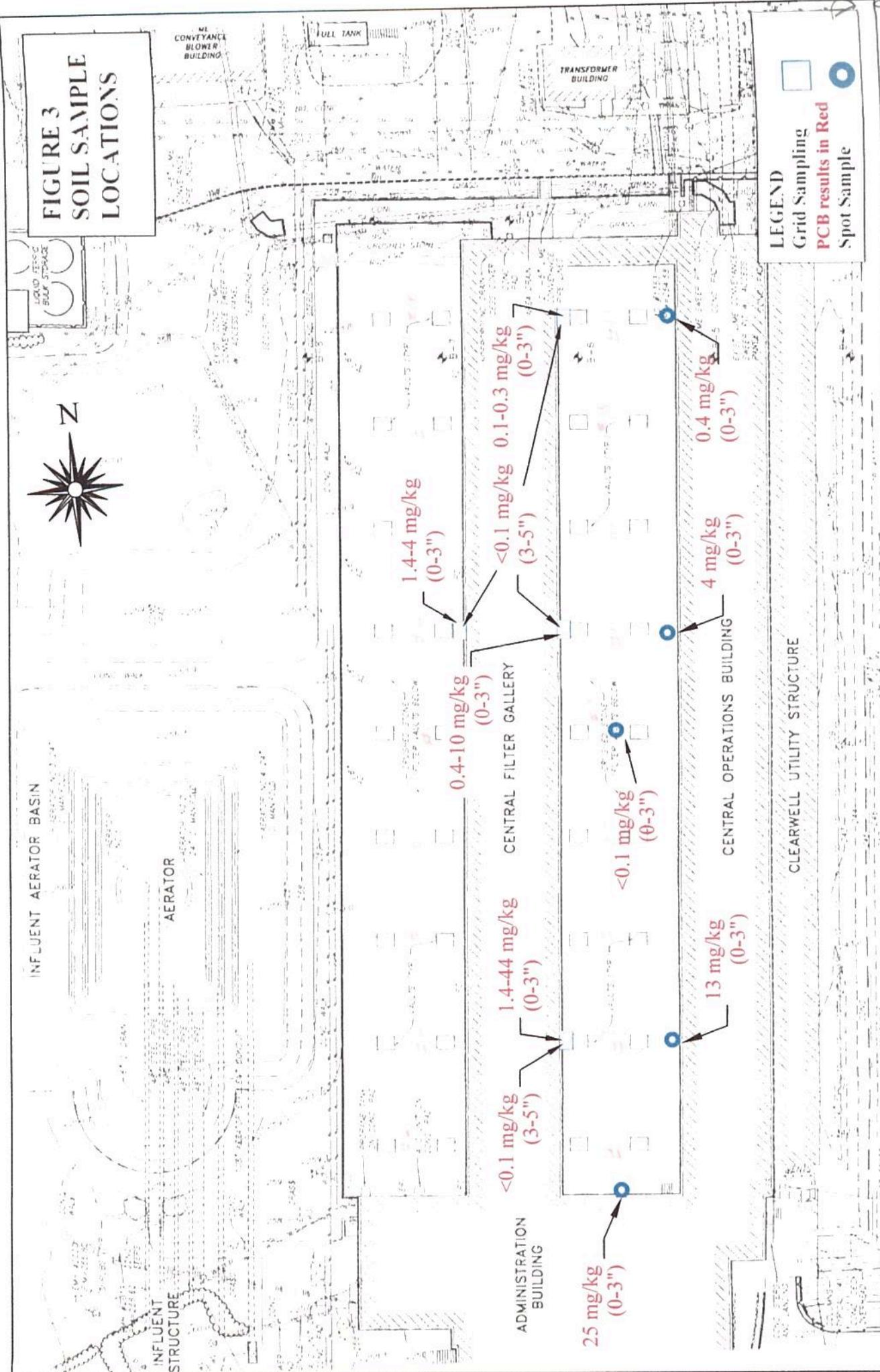
By: MMA

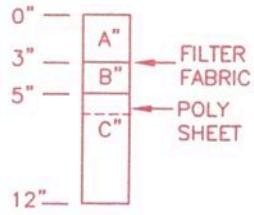
Base Map: GoogleEarth Image



**FIGURE 2**

**FIGURE 3**  
**SOIL SAMPLE LOCATIONS**





### SAMPLING DEPTHS

NOT TO SCALE

#### LEGEND:

- 1 SOIL SAMPLE LOCATION  
(TYPICAL BELOW EACH  
WINDOW)

EXISTING GRAVEL  
SURFACE(TYP.)

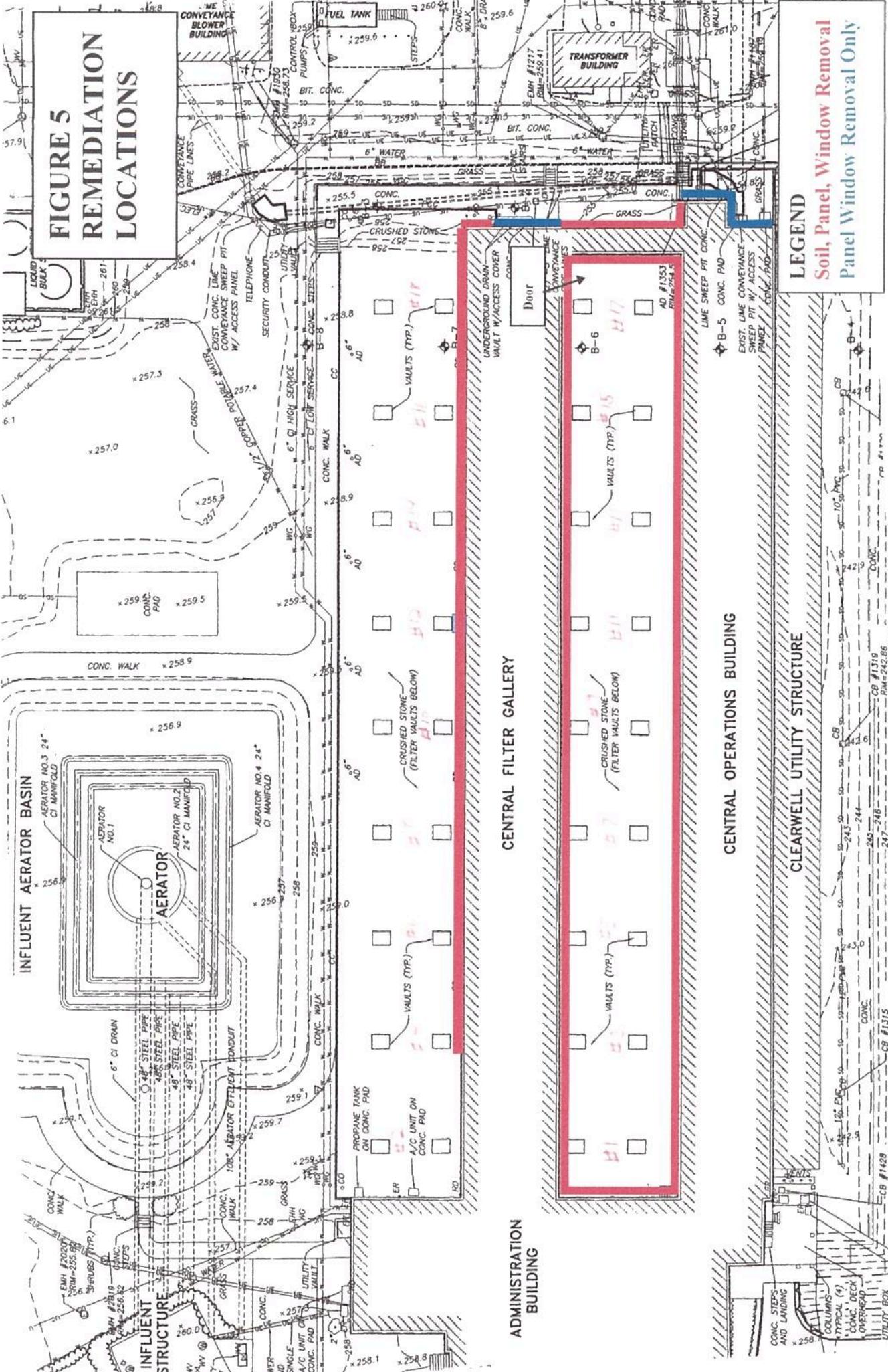
### SOIL SAMPLE GRID

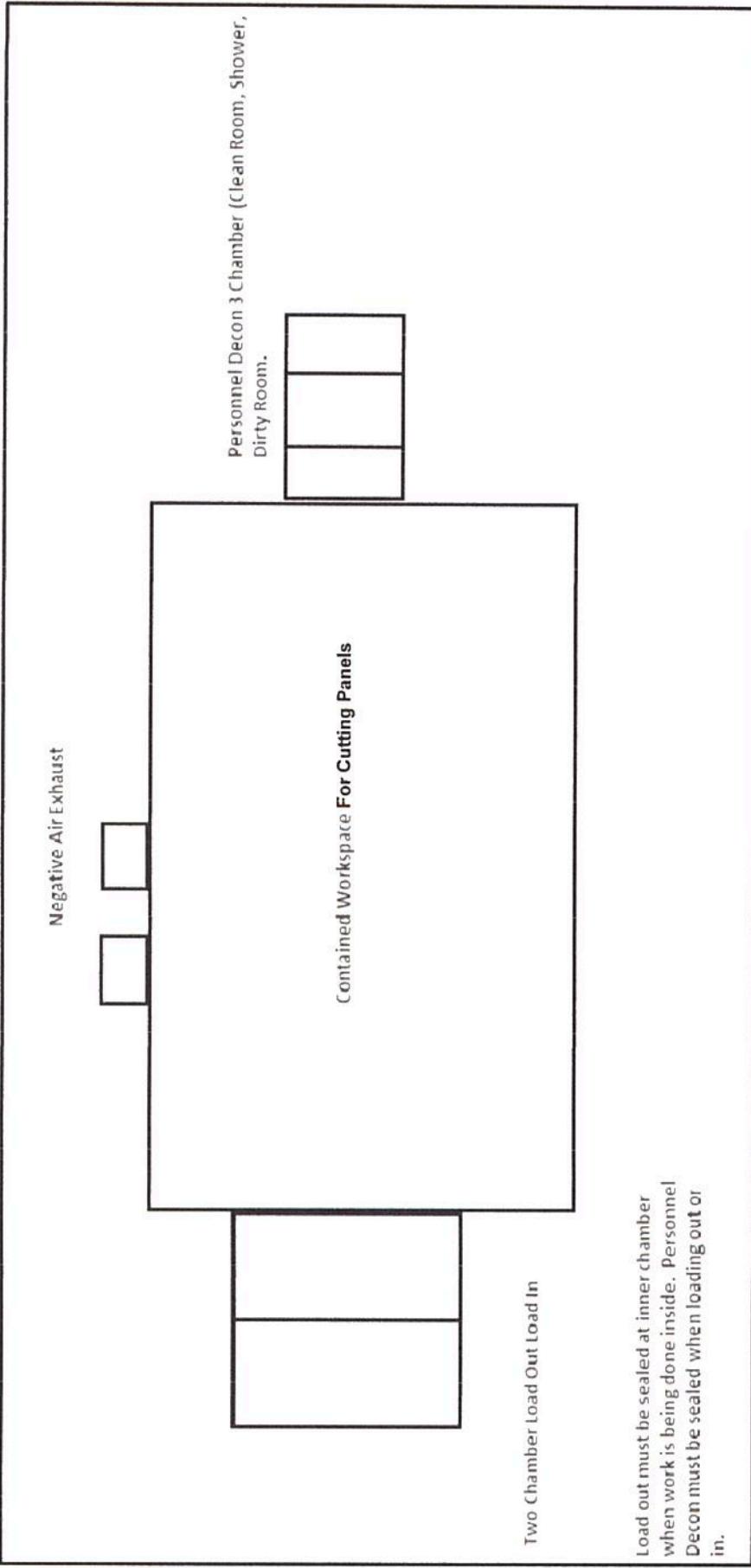
PHILIP J. HOLTON WATER PURIFICATION PLANT  
SCITUATE, RHODE ISLAND

MARCH 7, 2012

JOB. NO. 102-12

FIGURE NO. 4





Date: 4/5/12  
By: JL  
**FIGURE 6**

**CONCEPTUAL PLAN**  
Proposed Decontamination Enclosure  
System Plan for Panel Cutting  
PHILIP J. HOLTON PURIFICATION PLANT  
SCITUATE, RHODE ISLAND

**HEI**  
HOFFMAN ENGINEERING, INC  
640 Ten Rod Rd.  
North Kingston, RI 02852

TABLES

TABLE 1  
SUMMARY OF WINDOW / PANEL / CONCRETE PCB RESULTS  
HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

Location	Filter 3A Window			Filter 11A Window			Filter 17A Window		
Description	Window Caulk	Panel Caulk	Foundation Concrete*	Window Caulk	Panel Caulk	Foundation Concrete*	Window Caulk	Panel Caulk	Foundation Concrete*
PCBs (mg/kg)									
Aroclor 1254	< 440	< 47	< 0.4	< 430	< 37	< 0.4	270	0.7	< 0.5
Aroclor 1260	180,000	1,000	< 0.4	190,000	2,700	0.5	< 40	< 0.5	< 0.5

Notes:

\* Surface chip of concrete at exposed foundation face.  
Panel Caulk taken below window

Location	Filter 4B Window			Filter 10B Window			Filter 18B Window		
Description	Window Caulk	Panel Caulk	Foundation Concrete*	Window Caulk	Panel Caulk	Foundation Concrete*	Window Caulk	Panel Caulk	Foundation Concrete*
PCBs (mg/kg)									
Aroclor 1254	< 370	< 37	< 0.4	< 470	< 37	< 0.4	< 0.4	< 0.3	< 0.5
Aroclor 1260	120,000	570	0.6	140,000	950	0.7	< 0.4	7.3	0.6

Notes:

\* Surface chip of concrete at exposed foundation face.  
Panel Caulk taken below window

TABLE 2A  
SOIL SAMPLING RESULTS  
LOCATION # 3  
HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

Distance from Bldg (inches)	0-3	6 <sup>2</sup>	9 <sup>3</sup>	18 <sup>4</sup>	18 <sup>4</sup>	36
Depth (inches)	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>
PCBs (mg/kg)						
Aroclor 1254	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor 1260	44	< 0.1	16	4.1	< 0.1	1.4

Notes:

- Location # refers to window adjacent to filter gallery number.
1. Depths varied slightly based on amount of soil above filter fabric. Sample consists of the fines collected over the width of the window plus 3 inches to each side.
  2. Sample collected at middle of window area.
  3. Sample consisted of a composite of two soil samples taken at the outside edge of the window area 9 inches from the building, one collected on the northern edge and one from the southern edge.
  4. Sample consisted of a composite of three soil samples collected at evenly spaced locations from north to south located 18 inches from building window.

TABLE 2B  
SOIL SAMPLING RESULTS  
LOCATION # 11  
HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

Distance from Bldg (inches)	0-3	6 <sup>2</sup>	9 <sup>3</sup>	18 <sup>4</sup>	18 <sup>4</sup>	36
Depth (inches)	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>
PCBs (mg/kg)						
Aroclor 1254	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor 1260	1900 <sup>5</sup>	< 0.1	4.0	5.5	< 0.1	0.4

Notes:

Location # refers to window adjacent to filter gallery number.

1. Depths varied slightly based on amount of soil above filter fabric. Sample consists of the fines collected over the width of the window plus 3 inches to each side.
2. Sample collected at middle of window area.
3. Sample consisted of a composite of two soil samples taken at the outside edge of the window area 9 inches from the building, one collected on the northern edge and one from the southern edge.
4. Sample consisted of a composite of three soil samples collected at evenly spaced locations from north to south located 18 inches from building window.
5. Sample reanalyzed and 10 mg/kg was detected, original sample likely had a piece of caulking in it.

TABLE 2C  
 SOIL SAMPLING RESULTS  
 LOCATION # 12  
 HOLTON WATER TREATMENT PLANT  
 SCITUATE, RHODE ISLAND

Distance from Bldg (inches)	0-3	6 <sup>2</sup>	9 <sup>3</sup>	18 <sup>4</sup>	18 <sup>4</sup>	36
Depth (inches)	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>
PCBs (mg/kg)						
Aroclor 1254	NS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor 1260	NS	< 0.1	4.0	5.5	< 0.1	1.4

Notes:

Location # refers to window adjacent to filter gallery number.

NS Location not sampled

1. Depths varied slightly based on amount of soil above filter fabric. Sample consists of the fines collected over the width of the window plus 3 inches to each side.
2. Sample collected at middle of window area.
3. Sample consisted of a composite of two soil samples taken at the outside edge of the window area 9 inches from the building, one collected on the northern edge and one from the southern edge.
4. Sample consisted of a composite of three soil samples collected at evenly spaced locations from north to south located 18 inches from building window.

TABLE 2D  
SOIL SAMPLING RESULTS  
LOCATION # 17  
HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

Distance from Bldg (inches)	0-3	6 <sup>2</sup>	9 <sup>3</sup>	18 <sup>4</sup>	18 <sup>4</sup>	36
Depth (inches)	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>	0-3 <sup>1</sup>	3-5	0-3 <sup>1</sup>
PCBs (mg/kg)						
Aroclor 1254	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor 1260	0.3	< 0.1	0.3	1.0	< 0.1	0.1

Notes:

Location # refers to window adjacent to filter gallery number.

1. Depths varied slightly based on amount of soil above filter fabric. Sample consists of the fines collected over the width of the window plus 3 inches to each side.
2. Sample collected at middle of window area.
3. Sample consisted of a composite of two soil samples taken at the outside edge of the window area 9 inches from the building, one collected on the northern edge and one from the southern edge.
4. Sample consisted of a composite of three soil samples collected at evenly spaced locations from north to south located 18 inches from building window.

TABLE 3  
SUMMARY OF GRAB SURFACE SOIL SAMPLES  
HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

Location	SAMPLES ALONG CENTRAL OPERATIONS BUILDING FACE	
	Across from Filter # 3	Across from Filter # 11
PCBs (mg/kg)		Across from Filter # 17
Aroclor 1254	< 0.1	< 0.1
Aroclor 1260	13	4
		< 0.1

Notes:  
Samples collected within 3 inches of building. Depth of samples 0-3 inches.

Location	OTHER SAMPLES	
	Northface of Wall - South of Filter # 1 *	Center of Courtyard **
PCBs (mg/kg)		Geotextile Fabric Filter Area # 3
Aroclor 1254	12	< 0.1
Aroclor 1260	13	< 0.1
		1.9

Notes:  
\* Sample collected within 3 inches of building. Depth of sample 0-3 inches.  
\*\* Sample depth 0-3 inches.

## **APPENDICES**

APPENDIX 1  
*LIMITATIONS*

# Hoffman Engineering, Inc. (HEI)

640 Ten Rod Road  
North Kingstown, Rhode Island  
(401) 294-9032/Fax 294-1288

## STANDARD SUBSURFACE INVESTIGATION LIMITATIONS

The following provides Hoffman Engineering, Inc.'s standard Limitations for Environmental Investigations & Studies:

1. This report does not include: review of site compliance with Wetlands, Individual Sewage Disposal Systems (ISDS), Coastal, Zoning, or other regulations not specifically addressed in the scope of work.
2. This investigation did not include mold, lead-paint, asbestos or asbestos-containing products.
3. As part of this study, HEI may have reviewed several previous reports prepared by others. If appropriate, HEI has relied upon historical information, laboratory data, and other information contained therein. No independent evaluation of the reliability of this data was conducted.
4. HEI cannot guarantee that additional analytical testing and/or the installation of additional borings will not be recommended by HEI or required by the State regulatory agencies or financial institution based on the findings of this study.
5. Test pits, if conducted, were backfilled utilizing the material excavated and compacted with the backhoe. Settling may occur following heavy rainfall events. In the event that settling occurs, the Client shall be responsible for the costs of toping off the test pits and re-compaction, as necessary.
6. The Client owns and must maintain all on-site and off-site monitoring wells installed as part of this project. When these apparatus are no longer needed for monitoring purposes, the Client will bear the costs of properly closing them in accordance with State and local regulations and/or any other permits obtained, as well restoring the area to its original condition.
7. Water level readings were made in the test pits, borings and/or observation wells at times and under conditions stated on the exploration logs. This data was reviewed and interpretations made in the text of the final report. However, it should be noted that fluctuations in the level of groundwater may occur due to seasonal variations, weather conditions (e.g., rainfall) and other factors different from those prevailing at the time the measurements were made.
8. Laboratory testing was conducted by an outside certified laboratory whose data HEI relied upon. No independent evaluation of the reliability of this data was conducted.
9. Chemical analyses was performed for specific parameters at specific locations during the course of the study as described in the text of the report. It should be recognized that other constituents not analyzed for might be present in soil and groundwater at the site.
10. The conclusions and recommendations submitted in this report were based in part on data obtained from a limited number of soil and groundwater samples collected from widely space subsurface explorations and monitoring wells. The nature and extent of variations between these explorations may not become evidence until further investigation. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the recommendations of this report.
11. HEI through file reviews, documented site history and compliance, subsurface investigation and analytical testing parameters, is providing a professional judgment as to the likelihood and/or extent of (as appropriate) subsurface contamination from previous operations at the site. This judgment is based on the work performed and should not be construed as scientific certainty. No other guarantees, expressed or implied, are made as part of this work. Specifically, HEI cannot, and will not, represent that the Site does not contain hazardous materials, oil, solid waste debris or other latent conditions beyond those observed or identified during our study.

April 30, 2009

APPENDIX 2  
*SITE PHOTOGRAPHS*

LOCATION: HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

JOB #: 12-02



P-1 COURTYARD AREA EAST OF CENTRAL FILTER  
GALLERY BUILDING TO BE DEMOLISHED



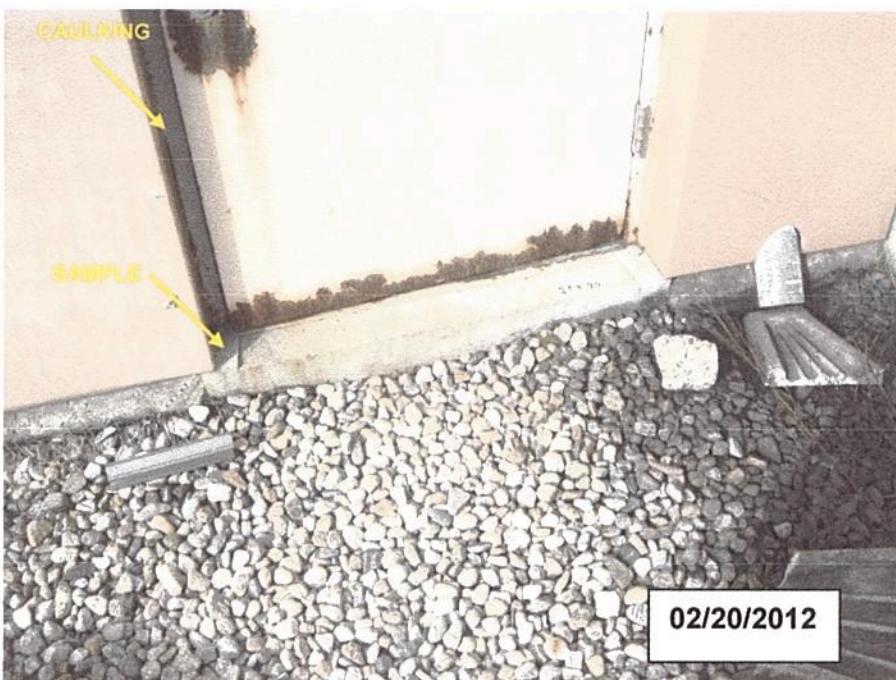
P-2 AREA WEST OF FILTER BUILDING TO BE  
DEMOLISHED

LOCATION: HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

JOB #: 12-02



P-3 DETAIL OF PANEL CAULKING



P-4 CAULKING AROUND DOOR FRAME. SILL TESTED  
AND NO PCBs DETECTED

LOCATION: HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

JOB #: 12-02



P-5 FILTER FABRIC UNDER ROUNDED STONE ABOVE  
SAND LAYER ABOVE POLY SHEETING



P-6 LOOKING NORTH ALONG WEST SIDE OF CENTRAL  
FILTER GALLERY BUILDING

LOCATION: HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

JOB #: 12-02



P-7 PHOTO SHOWING WINDOWS AND PANELS



P-8 TYPICAL HATCH; TESTING SMALL CAULKING LINE  
AROUND HATCH INDICATED <50 mg/kg PCBs.

LOCATION: HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND

JOB #: 12-02



P-9 NORTH SIDE OF BUILDING; NOTE CONCRETE PAD SAMPLED AND NO PCBs DETECTED



P-10 NORTH SIDE OF BUILDING WINDOWS; NOTE GRASS AREA TO BE REMEDIATED.

LOCATION: HOLTON WATER TREATMENT PLANT  
SCITUATE, RHODE ISLAND



P-11 TYPICAL GRID LAYOUT



P-12 TYPICAL GRID SAMPLING

APPENDIX 3  
*LABORATORY ANALYSES AND CHAIN-OF-CUSTODIES*



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 1/3/12  
Date Reported: 1/5/12  
P.O. #: 110829  
Work Order #: 1201-00089

---

**DESCRIPTION:** PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read "Sharon Baker".

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.L Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/3/12

Work Order #: 1201-00089

PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

Sample # 001

**SAMPLE DESCRIPTION:** 001 TOP LAYER WINDOW CAULK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/03/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<45	45	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1221	<45	45	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1232	<45	45	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1242	<45	45	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1248	<45	45	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1254	730	45	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1260	<45	45	mg/kg	SW-846 8082	1/5/12	JEB
Surrogate			RANGE	SW-846 8082	1/5/12	JEB
Tetrachloro-m-xylene (TCMX)	100		30-150%	SW-846 8082	1/5/12	JEB
Decachlorobiphenyl	100		30-150%	SW-846 8082	1/5/12	JEB
Extraction date	Extracted			SW846 3540	1/4/12	KAC
Moisture	N/A		%	SM2540 G.	1/4/12	BJK

Method 8082.

These results are reported on a "sample as received" basis. There was insufficient sample received to allow for a percent solids determination.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)

Date Received: 1/3/12

Work Order #: 1201-00089

PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

Sample # 002

SAMPLE DESCRIPTION: 002 BOTTOM LAYER WINDOW CAULK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/03/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<42	42	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1221	<42	42	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1232	<42	42	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1242	<42	42	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1248	<42	42	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1254	380	42	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1260	<42	42	mg/kg	SW-846 8082	1/5/12	JEB
Surrogate		RANGE		SW-846 8082	1/5/12	JEB
Tetrachloro-m-xylene (TCMX)	100		30-150%	SW-846 8082	1/5/12	JEB
Decachlorobiphenyl	100		30-150%	SW-846 8082	1/5/12	JEB
Extraction date	Extracted			SW846 3540	1/4/12	KAC
Moisture	N/A		%	SM2540 G.	1/4/12	BJK

Method 8082:

These results are reported on a "sample as received" basis. There was insufficient sample received to allow for a percent solids determination.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)

Date Received: 1/3/12

Work Order #: 1201-00089

PROJ# 110829 HART ENGINEERJNG - HOLTON TREATMENT PLANT

Sample # 003

SAMPLE DESCRIPTION: 003 PANEL CAULK UNDER WINDOW

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/03/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1242	<0.4	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1260	0.5	0.4	mg/kg	SW-846 8082	1/5/12	JEB
Surrogate			RANGE	SW-846 8082	1/5/12	JEB
Tetrachloro-m-xylene (TCMX)	86		30-150%	SW-846 8082	1/5/12	JEB
Decachlorobiphenyl	49		30-150%	SW-846 8082	1/5/12	JEB
Extraction date	Extracted			SW846 3540	1/4/12	KAC
Moisture	N/A		%	SM2540 G.	1/4/12	BJK

Method 8082:

These results are reported on a "sample as received" basis. There was insufficient sample received to allow for a percent solids determination.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)

Date Received: 1/3/12

Work Order #: 1201-00089

PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

Sample # 004

SAMPLE DESCRIPTION: 004 SOIL UNDER WINDOW

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/03/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Aroclor-1260	0.2	0.1	mg/kg dry	SW-846 8082	1/5/12	JEB
Surrogate			RANGE	SW-846 8082	1/5/12	JEB
Tetrachloro-m-xylene (TCMX)	80		30-150%	SW-846 8082	1/5/12	JEB
Decachlorobiphenyl	47		30-150%	SW-846 8082	1/5/12	JEB
Extraction date	Extracted			SW846 3540	1/4/12	KAC
Moisture	44		%	SM2540 G.	1/4/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/3/12

Work Order #: 1201-00089

PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

Sample # 005

SAMPLE DESCRIPTION: 005 WATERPROOFING SIDE WINDOW

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/03/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.7	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1221	<0.7	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1232	<0.7	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1242	<0.7	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1248	<0.7	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1254	<0.7	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1260	13	0.7	mg/kg	SW-846 8082	1/5/12	JEB
Surrogate			RANGE	SW-846 8082	1/5/12	JEB
Tetrachloro-m-xylene (TCMX)	86		30-150%	SW-846 8082	1/5/12	JEB
Decachlorobiphenyl	59		30-150%	SW-846 8082	1/5/12	JEB
Extraction date	Extracted			SW846 3540	1/4/12	KAC
Moisture	N/A		%	SM2540 G.	1/4/12	BJK

Method 8082:

These results are reported on a "sample as received" basis. There was insufficient sample received to allow for a percent solids determination.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/3/12

Work Order #: 1201-00089

PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

Sample # 006

**SAMPLE DESCRIPTION:** 006 WATERPROOFING BELOW WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/03/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Aroclor-1260	3.5	0.5	mg/kg	SW-846 8082	1/5/12	JEB
Surrogate			RANGE	SW-846 8082	1/5/12	JEB
Tetrachloro-m-xylene (TCMX)	85		30-150%	SW-846 8082	1/5/12	JEB
Decachlorobiphenyl	61		30-150%	SW-846 8082	1/5/12	JEB
Extraction date	Extracted			SW846 3540	1/4/12	KAC
Moisture	N/A		%	SM2540 G.	1/4/12	BJK

**Method 8082:**

These results are reported on a "sample as received" basis. There was insufficient sample received to allow for a percent solids determination.



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1201-00089  
**Date:** 1/5/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	1/5/2012
Aroclor-1221	mg/kg dry	<0.1	1/5/2012
Aroclor-1232	mg/kg dry	<0.1	1/5/2012
Aroclor-1242	mg/kg dry	<0.1	1/5/2012
Aroclor-1248	mg/kg dry	<0.1	1/5/2012
Aroclor-1254	mg/kg dry	<0.1	1/5/2012
Aroclor-1260	mg/kg dry	<0.1	1/5/2012
<b>Surrogate</b>	RANGE		1/5/2012
Tetrachloro-m-xylene (TCMX)	30-150%	85	1/5/2012
Decachlorobiphenyl	30-150%	86	1/5/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.267	81	1/5/2012
Aroclor-1260	mg/kg dry	0.33	0.286	87	1/5/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	30-150%		86		1/5/2012
Decachlorobiphenyl	30-150%		86		1/5/2012

## RECEIPT

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

No. of Samples : 6  
Date Sampled : 1/3/12  
Date Received: 1/3/12  
Due Date : 1/5/12

Phone : 401-737-8500  
Fax : 401-738-1970  
P.O. #: 110829

Priority : High 2  
Certificate DEF1PG  
Work Order #: 1201-00089  
Project EAM1

**DESCRIPTION:** PROJ# 110829 HART ENGINEERING - HOLTON TREATMENT PLANT

Comments:

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Sample - 001 001 TOP LAYER WINDOW CAULK

Sample Type: GRAB Sample Date / Time : 1/03/2012

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 002 002 BOTTOM LAYER WINDOW CAULK

Sample Type: GRAB Sample Date / Time : 1/03/2012

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 003 003 PANEL CAULK UNDER WINDOW

Sample Type: GRAB Sample Date / Time : 1/03/2012

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 004 004 SOIL UNDER WINDOW

Sample Type: GRAB Sample Date / Time : 1/03/2012

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

Qc Codes

DL tech note

Reviewed By: \_\_\_\_\_

Additional Cert.

State Form Reviewed

Date: \_\_\_\_\_

---

Sample - 005 005 WATERPROOFING SIDE WINDOW

Sample Type: GRAB

Sample Date / Time : 1/03/2012

*Tests*                    *Test Description*

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 006 006 WATERPROOFING BELOW WINDOW

Sample Type: GRAB

Sample Date / Time : 1/03/2012

*Tests*                    *Test Description*

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet



Page 1 of 2

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 1/6/12  
Date Reported: 1/10/12  
P.O. #: 110829  
Work Order #: 1201-00330

---

### DESCRIPTION: PROJECT #110829 HOLTON TREATMENT PLANT

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Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



\_\_\_\_\_  
Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/6/12

Work Order #: 1201-00330

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 001

SAMPLE DESCRIPTION: 01-BLACK WATER PROOFING 4FT AWAY FROM WINDOW

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/06/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<1.1	1.1	mg/kg dry	SW-846 8082	1/10/12	JEB
Aroclor-1221	<1.1	1.1	mg/kg dry	SW-846 8082	1/10/12	JEB
Aroclor-1232	<1.1	1.1	mg/kg dry	SW-846 8082	1/10/12	JEB
Aroclor-1242	<1.1	1.1	mg/kg dry	SW-846 8082	1/10/12	JEB
Aroclor-1248	<1.1	1.1	mg/kg dry	SW-846 8082	1/10/12	JEB
Aroclor-1254	<1.1	1.1	mg/kg dry	SW-846 8082	1/10/12	JEB
Aroclor-1260	28	2.2	mg/kg dry	SW-846 8082	1/10/12	JEB
Surrogate		RANGE		SW-846 8082	1/10/12	JEB
Tetrachloro-m-xylene (TCMX)	71	30-150%		SW-846 8082	1/10/12	JEB
Decachlorobiphenyl	30	30-150%		SW-846 8082	1/10/12	JEB
Extraction date	Extracted			SW846 3540	1/6/12	THP
Moisture	<1	%		SM2540 G.	1/10/12	BJK



## CHAIN OF CUSTODY RECORD

41 Illinois Avenue  
Warwick, RI 02888-3007  
800-937-2580 • Fax: 401-738-1970  
131 Coolidge St., Suite 105  
Hudson, MA 01749-1331  
800-937-2580 • Fax: 978-568-0078

### Field Sample Identification

Date Collected: 11/12      Time Collected: 11:52 AM  
Sample ID: Q1 - Black water from laundry  
from laundry

Grab or Composite

# of Containers & Type:

Matrix Code:

Preservation Code:

### Client Information

Company Name: RI Analytical  
Address: 131 Coolidge St.  
City / State / Zip: Hudson, MA 01749  
Telephone: 978-568-0078  
Contact Person: *[Signature]*

### Requisitioned By Signatures

Date: 11/12      Time: 11:52 AM  
*[Signature]*

### Project Information

Project Name: RI Analytical Project  
P.O. Number:  
Report To: RI Analytical  
Phone: Fax  
Sampled By: *[Signature]*  
Email report to these addresses:  
Quote No: *[Signature]*

Turn Around Time  
 Normal       EMAIL Report  
 5 Business days. Possible surcharge  
 Rush - Date Due: *[Signature]*

Lab Use Only  
 Sample Pick-Up Only  
 RIAL sample; attach field hours  
 Shipped on ice  
Workorder No: 12C1 - C63C

Temp. Upon Receipt: *[Signature]*  
Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3      MCP Data Enhancement QC Package? Yes No  
*[Signature]*

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SB=NaHSO4, SH=NaOH, T=NaS-O3, Z=ZnOAC  
Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, SL=Soil, A=Air, B=Bulk/Solid, WP=Wipe, O=

Page 1 of 1

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1201-00330  
**Date:** 1/10/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	1/10/2012
Aroclor-1221	mg/kg dry	<0.1	1/10/2012
Aroclor-1232	mg/kg dry	<0.1	1/10/2012
Aroclor-1242	mg/kg dry	<0.1	1/10/2012
Aroclor-1248	mg/kg dry	<0.1	1/10/2012
Aroclor-1254	mg/kg dry	<0.1	1/10/2012
Aroclor-1260	mg/kg dry	<0.1	1/10/2012
<b>Surrogate</b>			
Tetrachloro-m-xylene (TCMX)	RANGE		1/10/2012
	30-150%	92	1/10/2012
Decachlorobiphenyl	30-150%	92	1/10/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.274	83	1/10/2012
Aroclor-1260	mg/kg dry	0.33	0.297	90	1/10/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE				1/10/2012
	30-150%		92		1/10/2012
Decachlorobiphenyl	30-150%		94		1/10/2012

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00722

PROJECT# 110829 HOLTON TREATMENT PLANT

Sample # 002

**SAMPLE DESCRIPTION:** 2D FILTER 11A

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<58	58	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1221	<58	58	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1232	<58	58	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1242	<58	58	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1248	<58	58	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1254	<58	58	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1260	1900	58	mg/kg dry	SW-846 8082	1/24/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/20/12	JEB
Extraction date	Extracted			SW846 3540	1/19/12	KAC
Moisture	14		%	SM2540 G.	1/19/12	BJK

The total weight of the sample was 4644.11 grams. The amount of sample that passed through the number 4 sieve was 94.38 grams.

Method 8082:

DL = Surrogate diluted below the instrument calibration range.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00722

PROJECT# 110829 HOLTON TREATMENT PLANT

Sample # 003

**SAMPLE DESCRIPTION:** 3D FILTER 17A

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1260	0.3	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	68		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	85		30-150%	SW-846 8082	1/20/12	JEB
Extraction date	Extracted			SW846 3540	1/19/12	KAC
Moisture	33		%	SM2540 G.	1/19/12	BJK

The total weight of the sample was 3670.00 grams. The amount of sample that passed through the number 4 sieve was 229.52 grams.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00722

PROJECT# 110829 HOLTON TREATMENT PLANT

Sample # 004

**SAMPLE DESCRIPTION:** 4D FILTER 18B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Surrogate		RANGE		SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	68		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	77		30-150%	SW-846 8082	1/20/12	JEB
Extraction date	Extracted			SW846 3540	1/19/12	KAC
Moisture	6		%	SM2540 G.	1/19/12	BJK

The total weight of the sample was 6228.78 grams. The amount of sample that passed through the number 4 sieve was 640.56 grams.

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00722

PROJECT# 110829 HOLTON TREATMENT PLANT

Sample # 005

**SAMPLE DESCRIPTION:** SD FILTER 10B**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1260	5.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	75		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	86		30-150%	SW-846 8082	1/20/12	JEB
Extraction date	Extracted			SW846 3540	1/19/12	KAC
Moisture	13		%	SM2540 G.	1/20/12	KAC

The total weight of the sample was 3881.88 grams. The amount of sample that passed through the number 4 sieve was 520.85 grams.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00722

PROJECT# 110829 HOLTON TREATMENT PLANT

Sample # 006

**SAMPLE DESCRIPTION:** 6D FILTER 4B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	1/20/12	JEB
Aroclor-1260	12	1.0	mg/kg dry	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	61		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	73		30-150%	SW-846 8082	1/20/12	JEB
Extraction date		Extracted		SW846 3540	1/19/12	KAC
Moisture	21		%	SM2540 G.	1/20/12	KAC

The total weight of the sample was 5840.59 grams. The amount of sample that passed through the number 4 sieve was 159.46 grams.



## CHAIN OF CUSTODY RECORD

41 Illinois Avenue  
Warwick, RI 02888-3007  
800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105  
Hudson, MA 01749-1331  
800-937-2580 • Fax: 978-568-0078

Date Collected Time Collected

### Field Sample Identification

10/11/01 10/11/01 34  
20 " 11/14  
20 11 17A  
40 11 18B  
50 11 10B  
20 11 4B

# of Containers & Type

Grab or Composite

Preservation Code

Matrix Code

Sampled for  
Sediment  
Soil  
Water

Polymer

Plastic

Aluminum

Steel

Wood

Concrete

Brick

Stainless Steel

Cast Iron

Brass

Monel

Other

### Client Information

Company Name:	KFCI, Inc. <i>KFCI</i>		
Address:	117 Main Street, Box 02888		
City / State / Zip:	Warwick, RI 02888		
Telephone:	401-738-1970		
Contact Person:	John M. Johnson		

### Project Information

Project Name:	KFCI, Inc. Turnaround Plan		
PO Number:			
Report To:	John M. Johnson		
Sample By:	John M. Johnson		
Quote No.:			
Date:	10/11/01	Time:	14:45
Date:	10/11/01	Time:	14:45
Turn Around Time			
<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> EMAIL Report		
5 Business days. Possible surcharge			
Rush - Date Due:	/	/	/

### Project Comments

Circle if applicable:	GW-1, GW-2, GW-3, S-1, S-2, S-3	MCP Data Enhancement QC Package?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
* See Attached for R2 Sample			
Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=Methanol, N=Nitric Acid, NP=None, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, DW=Drinking Water, WW=Wastewater, SW=Surface Water, T=NaOH, SB=NaHSO4, SH=NaOAc, Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, WP=Wipe, O=			
10/11/01 14:45			

### Lab Use Only

Sample Pick Up Only	<input type="checkbox"/>
RIAL sampled, attach field notes	<input type="checkbox"/>
Shipped on ice	<input type="checkbox"/>
Workorder No. 1234567890	<input type="checkbox"/>
Temp. Upon Receipt: 0°C	<input type="checkbox"/>

Page 1 of 1

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1201-00722  
**Date:** 1/24/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	1/20/2012
Aroclor-1221	mg/kg dry	<0.1	1/20/2012
Aroclor-1232	mg/kg dry	<0.1	1/20/2012
Aroclor-1242	mg/kg dry	<0.1	1/20/2012
Aroclor-1248	mg/kg dry	<0.1	1/20/2012
Aroclor-1254	mg/kg dry	<0.1	1/20/2012
Aroclor-1260	mg/kg dry	<0.1	1/20/2012
<b>Surrogate</b>	RANGE		1/20/2012
Tetrachloro-m-xylene (TCMX)	30-150%	87	1/20/2012
Decachlorobiphenyl	30-150%	102	1/20/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.232	70	1/20/2012
Aroclor-1260	mg/kg dry	0.33	0.287	87	1/20/2012
<b>Surrogate</b>	RANGE				1/20/2012
Tetrachloro-m-xylene (TCMX)	30-150%		85		1/20/2012
Decachlorobiphenyl	30-150%		114		1/20/2012
Aroclor-1016	mg/kg dry	0.33	0.239	72	1/20/2012
Aroclor-1260	mg/kg dry	0.33	0.279	85	1/20/2012
<b>Surrogate</b>	RANGE				1/20/2012
Tetrachloro-m-xylene (TCMX)	30-150%		86		1/20/2012
Decachlorobiphenyl	30-150%		106		1/20/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 1/11/12  
Date Reported: 1/20/12  
P.O. #: 110829  
Work Order #: 1201-00779

---

**DESCRIPTION:** PROJECT #110829 HOLTON TREATMENT PLANT

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read "Sharon Baker".

\_\_\_\_\_  
Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 001

**SAMPLE DESCRIPTION:** 1A WINDOW CAULK FILTER 3A

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<440	440	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<440	440	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<440	440	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<440	440	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<440	440	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<440	440	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	180000	4400	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 002

SAMPLE DESCRIPTION: 1B PANEL CAULK FILTER 3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<47	47	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<47	47	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<47	47	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<47	47	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<47	47	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<47	47	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	1000	47	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate		RANGE		SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

Sample # 003

SAMPLE DESCRIPTION: 1C FOUNDATION CEMENT 3A

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate		RANGE		SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	97		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	91		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 004

**SAMPLE DESCRIPTION:** 2A WINDOW CAULK FILTER 11A

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<430	430	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<430	430	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<430	430	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<430	430	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<430	430	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<430	430	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	190000	4300	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 005

**SAMPLE DESCRIPTION:** 2B PANEL CAULK FILTER 11A

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	2700	37	mg/kg	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date		Extracted		SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

Sample # 006

**SAMPLE DESCRIPTION:** 2C FOUNDATION CAULK FILTER 11A

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	0.5	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	71		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	76		30-150%	SW-846 8082	1/19/12	JEB
Extraction date		Extracted		SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 007

**SAMPLE DESCRIPTION:** 3A WINDOW CAULK FILTER 17A**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<40	40	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<40	40	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<40	40	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<40	40	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<40	40	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	270	40	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1260	<40	40	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

Sample # 008

**SAMPLE DESCRIPTION:** 3B PANEL CAULK FILTER 17A**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	0.7	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	87		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	83		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 009

**SAMPLE DESCRIPTION:** 3C FOUNDATION CEMENT 17A**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	103		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	107		30-150%	SW-846 8082	1/19/12	JEB
Extraction date		Extracted		SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

Sample # 010

**SAMPLE DESCRIPTION:** 4A WINDOW CAULK 18B**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	19*		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	66		30-150%	SW-846 8082	1/19/12	JEB
Extraction date		Extracted		SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

\* Surrogate is outside QC Range.

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

**PROJECT #110829 HOLTON TREATMENT PLANT**

Sample # 011

**SAMPLE DESCRIPTION:** 4B PANEL CAULK FILTER 18B**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	7.3	0.3	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	79		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	85		30-150%	SW-846 8082	1/19/12	JEB
Extraction date		Extracted		SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

Sample # 012

**SAMPLE DESCRIPTION:** 4C FOUNDATION CEMENT 18B**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/11/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	0.6	0.5	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	88		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	62		30-150%	SW-846 8082	1/19/12	JEB
Extraction date		Extracted		SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 013

SAMPLE DESCRIPTION: 5A WINDOW CAULK FILTER 10B

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<470	470	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<470	470	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<470	470	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<470	470	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<470	470	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<470	470	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	140000	4700	mg/kg	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 014

**SAMPLE DESCRIPTION:** 5B PANEL CAULK FILTER 10B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<37	37	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	950	37	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

Sample # 015

**SAMPLE DESCRIPTION:** 5C FOUNDATION CEMENT FILTER 10B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	0.7	0.4	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	95		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	81		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 016

**SAMPLE DESCRIPTION:** 6A WINDOW CAULK FILTER 4B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<370	370	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1221	<370	370	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1232	<370	370	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1242	<370	370	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1248	<370	370	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1254	<370	370	mg/kg	SW-846 8082	1/19/12	JEB
Aroclor-1260	120000	3700	mg/kg	SW-846 8082	1/19/12	JEB
Surrogate			RANGE	SW-846 8082	1/19/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/19/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/19/12	JEB
Extraction date	Extracted			SW846 3540	1/13/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 017

**SAMPLE DESCRIPTION:** 6B PANEL CAULK FILTER 4B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<37	37	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1221	<37	37	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1232	<37	37	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1242	<37	37	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1248	<37	37	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1254	<37	37	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1260	570	37	mg/kg	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	1/20/12	JEB
Extraction date		Extracted		SW846 3540	1/17/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

DL = Surrogates diluted below instrument calibration range.

Sample # 018

**SAMPLE DESCRIPTION:** 6C FOUNDATION CEMENT FILTER 4B

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1242	<0.4	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1260	0.6	0.4	mg/kg	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	87		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	76		30-150%	SW-846 8082	1/20/12	JEB
Extraction date		Extracted		SW846 3540	1/17/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/11/12

Work Order #: 1201-00779

PROJECT #110829 HOLTON TREATMENT PLANT

Sample # 019

SAMPLE DESCRIPTION: 07 - PAINT ON PANELS (PAINT ONLY)

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/11/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<4.8	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1221	<4.8	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1232	<4.8	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1242	<4.8	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1248	<4.8	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1254	<4.8	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Aroclor-1260	9.2	4.8	mg/kg	SW-846 8082	1/20/12	JEB
Surrogate			RANGE	SW-846 8082	1/20/12	JEB
Tetrachloro-m-xylene (TCMX)	80		30-150%	SW-846 8082	1/20/12	JEB
Decachlorobiphenyl	80		30-150%	SW-846 8082	1/20/12	JEB
Extraction date	Extracted			SW846 3540	1/17/12	KAC
Moisture	N/A		%	SM2540 G.	1/17/12	BJK



## CHAIN OF CUSTODY RECORD

41 Illinois Avenue  
Warwick, RI 02888-3007  
800-937-2380 • Fax: 401-738-1970

131 Coolidge St., Suite 105  
Hudson, MA 01749-1331

800-937-2380 • Fax: 978-568-0078

Date Collected Time Collected

1/11/12

Time

Collected

Field Sample Identification

1A Island Creek Filter 3A

1B Pond Creek Filter 3A

1C Foundation Boxes 3A

2A Wastewater Pump Filter 11A

2B Pump Filter 11A

2C Foundation Boxes 11A

3A Island Creek Filter 17A

3B Pond Creek Filter 17A

4A Wastewater Pump 18A

4B Pond Creek Filter 18A

5A Island Creek Filter 10B

5B Pond Creek Filter 10B

Grab or Composite

# of Contaminants & Type

P

C

M

A

G

S

P

R

F

E

L

S

W

H

D

I

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

0

1

2

3

4

5

6

7

8

9

0

### Client Information

Company Name: *(Signature)*

Address: *141 Illinois Ave.*

City / State / Zip: *Warwick, RI 02888*

Telephone:

Contact Person:

### Project Information

Project Name: *R.I. Chain of Custody Plant*

Project Number: *110829*

Report To: *CAM*

Phone:

Fax:

Sampled By: *JTM*

Email report to these addresses:

Quote No.:

Project Comments

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No

*1/11/12*

*1/11/12*

*1/11/12*

*1/11/12*

*1/11/12*

*1/11/12*

Temp. Upon Receipt

*1/11/12*

*1/11/12*

*1/11/12*

*1/11/12*

*1/11/12*

Lab Use Only

Sample Pick-Up Only

RIAI sampled, attach field hours

Shipped on ice

Workorder No: *1201-90779*

Page *1* of *1*

Containants: P=Poly, G=Glass, AG=Amber Glass, V=Vial, SI=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SB=NaHSO4, SH=NaHSO3, T=NaOH, W=Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Water, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1201-00779  
**Date:** 1/20/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	1/19/2012
Aroclor-1221	mg/kg dry	<0.1	1/19/2012
Aroclor-1232	mg/kg dry	<0.1	1/19/2012
Aroclor-1242	mg/kg dry	<0.1	1/19/2012
Aroclor-1248	mg/kg dry	<0.1	1/19/2012
Aroclor-1254	mg/kg dry	<0.1	1/19/2012
Aroclor-1260	mg/kg dry	<0.1	1/19/2012
<b>Surrogate</b>	RANGE		1/19/2012
Tetrachloro-m-xylene (TCMX)	30-150%	96	1/19/2012
Decachlorobiphenyl	30-150%	71	1/19/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.269	82	1/19/2012
Aroclor-1260	mg/kg dry	0.33	0.271	82	1/19/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE				1/19/2012
Decachlorobiphenyl	30-150%		93	1/19/2012	
	30-150%		84	1/19/2012	

## RECEIPT

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

No. of Samples : 19  
Date Sampled : 1/11/12  
Date Received: 1/11/12  
Due Date : 1/18/12

Phone : 401-737-8500  
Fax : 401-738-1970  
P.O. #: 110829

Priority : Standard 4  
Certificate DEF1PG  
Work Order #: 1201-00779  
Project EAM1 ✓

**DESCRIPTION:** PROJECT #110829 HOLTON TREATMENT PLANT ✓

Comments: 019: SEE DD, SEE NOTE ON COC ✓

---

Sample - 001 1A WINDOW CAULK FILTER 3A ✓

Sample Type: GRAB ✓      Sample Date / Time : 1/11/2012

Tests                  Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 002 1B PANEL CAULK FILTER 3A ✓

Sample Type: GRAB ✓      Sample Date / Time : 1/11/2012

Tests                  Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 003 1C FOUNDATION CEMENT 3A ✓

Sample Type: GRAB ✓      Sample Date / Time : 1/11/2012 ✓

Tests                  Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 004 2A WINDOW CAULK FILTER 11A ✓

Sample Type: GRAB ✓      Sample Date / Time : 1/11/2012

Tests                  Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

Qc Codes

DL tech note

Reviewed By:

An

Additional Cert.

State Form Reviewed

Date: 1/13/12

Sample - 005    2B PANEL CAULK FILTER 11A ✓

Sample Type:    GRAB ✓                      Sample Date / Time :    1/11/2012

Tests                      *Test Description*

OC-80SOX-S     PCB  
OP-PCBSOX     Prep. for PCB Soxlet

---

Sample - 006    2C FOUNDATION CAULK FILTER 11A ✓

Sample Type:    GRAB ✓                      Sample Date / Time :    1/11/2012

Tests                      *Test Description*

OC-80SOX-S     PCB  
OP-PCBSOX     Prep. for PCB Soxlet

---

Sample - 007    3A WINDOW CAULK FILTER 17A ✓

Sample Type:    GRAB ✓                      Sample Date / Time :    1/11/2012

Tests                      *Test Description*

OC-80SOX-S     PCB  
OP-PCBSOX     Prep. for PCB Soxlet

---

Sample - 008    3B PANEL CAULK FILTER 17A ✓

Sample Type:    GRAB ✓                      Sample Date / Time :    1/11/2012

Tests                      *Test Description*

OC-80SOX-S     PCB  
OP-PCBSOX     Prep. for PCB Soxlet

---

Sample - 009    3C FOUNDATION CEMENT 17A ✓

Sample Type:    GRAB ✓                      Sample Date / Time :    1/11/2012

Tests                      *Test Description*

OC-80SOX-S     PCB  
OP-PCBSOX     Prep. for PCB Soxlet

---

Sample - 010    4A WINDOW CAULK FILTER 18B ✓

Sample Type:    GRAB                         Sample Date / Time :    1/11/2012

Tests                      *Test Description*

OC-80SOX-S     PCB  
OP-PCBSOX     Prep. for PCB Soxlet

Sample - 011 4B PANEL CAULK FILTER 18B ✓

Sample Type: GRAB ✓ Sample Date / Time : 1/11/2012 ✓

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 012 4C FOUNDATION CEMENT 18B ✓

Sample Type: GRAB ✓ Sample Date / Time : 1/11/2012 ✓

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 013 5A WINDOW CAULK FILTER 10B ✓

Sample Type: GRAB ✓ Sample Date / Time : 1/11/2012 ✓

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 014 5B PANEL CAULK FILTER 10B ✓

Sample Type: GRAB ✓ Sample Date / Time : 1/11/2012 ✓

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 015 5C FOUNDATION CEMENT FILTER 10B ✓

Sample Type: GRAB ✓ Sample Date / Time : 1/11/2012 ✓

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 016 6A WINDOW CAULK FILTER 4B ✓

Sample Type: GRAB ✓ Sample Date / Time : 1/11/2012 ✓

Tests Test Description

OC-80SOX-S  PCB  
OP-PCBSOX  Prep. for PCB Soxlet

Sample - 017 6B PANEL CAULK FILTER 4B ✓

Sample Type: GRAB ✓

Sample Date / Time : 1/11/2012 ✓

*Tests*                    *Test Description*

OC-80SOX-S  PCB

OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 018 6C FOUNDATION CEMENT FILTER 4B ✓

Sample Type: GRAB ✓

Sample Date / Time : 1/11/2012 ✓

*Tests*                    *Test Description*

OC-80SOX-S  PCB

OP-PCBSOX  Prep. for PCB Soxlet

---

Sample - 019 07 - PAINT ON PANELS (PAINT ONLY) ✓

Sample Type: GRAB ✓

Sample Date / Time : 1/11/2012 ✓

*Tests*                    *Test Description*

OC-80SOX-S  PCB

OP-PCBSOX  Prep. for PCB Soxlet



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 1/31/12  
Date Reported: 2/7/12  
P.O. #: 110829  
Work Order #: 1201-01975

---

**DESCRIPTION:** PROJECT #110829 CITY OF PROVIDENCE WATER TREATMENT

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read "Sharon Baker".

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/31/12

Work Order #: 1201-01975

PROJECT #110829 CITY OF PROVIDENCE WATER TREATMENT

Sample # 001

**SAMPLE DESCRIPTION:** DOOR CAULK NORTH END

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<41	41	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1221	<41	41	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1232	<41	41	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1242	<41	41	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1248	<41	41	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1254	<41	41	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1260	2800	83	mg/kg	SW-846 8082	2/7/12	JEB
Surrogate			RANGE	SW-846 8082	2/4/12	JEB
Tetrachloro-m-xylene (TCMX)	99		30-150%	SW-846 8082	2/4/12	JEB
Decachlorobiphenyl	103		30-150%	SW-846 8082	2/4/12	JEB
Extraction date			Extracted	SW846 3540	2/2/12	JEB
Moisture			Not Applicable	%	SM2540 G.	BJK

Sample # 002

**SAMPLE DESCRIPTION:** CAULK ABOVE WINDOW F17

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<1	1	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1221	<1	1	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1232	<1	1	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1242	2	1	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1248	<1	1	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1254	<1	1	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1260	<1	0.1	mg/kg	SW-846 8082	2/7/12	JEB
Surrogate			RANGE	SW-846 8082	2/7/12	JEB
Tetrachloro-m-xylene (TCMX)	109		30-150%	SW-846 8082	2/7/12	JEB
Decachlorobiphenyl	98		30-150%	SW-846 8082	2/7/12	JEB
Extraction date			Extracted	SW846 3540	2/2/12	BJK
Moisture			Not Applicable	%	SM2540 G.	BJK

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/31/12

Work Order #: 1201-01975

PROJECT #110829 CITY OF PROVIDENCE WATER TREATMENT

Sample # 003

**SAMPLE DESCRIPTION:** CAULK ON SIDE PANEL F10**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<47	47	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1221	<47	47	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1232	<47	47	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1242	<47	47	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1248	<47	47	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1254	<47	47	mg/kg	SW-846 8082	2/7/12	JEB
Aroclor-1260	3500	230	mg/kg	SW-846 8082	2/7/12	JEB
Surrogate			RANGE	SW-846 8082	2/4/12	JEB
Tetrachloro-m-xylene (TCMX)	95		30-150%	SW-846 8082	2/4/12	JEB
Deeacchlorobiphenyl	101		30-150%	SW-846 8082	2/4/12	JEB
Extraction date	Extracted			SW846 3540	2/2/12	BJK
Moisture	Not Applicable		%	SM2540 G.	2/3/12	BJK



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1201-01975  
**Date:** 2/7/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/3/2012
Aroclor-1221	mg/kg dry	<0.1	2/3/2012
Aroclor-1232	mg/kg dry	<0.1	2/3/2012
Aroclor-1242	mg/kg dry	<0.1	2/3/2012
Aroclor-1248	mg/kg dry	<0.1	2/3/2012
Aroclor-1254	mg/kg dry	<0.1	2/3/2012
Aroclor-1260	mg/kg dry	<0.1	2/3/2012
<b>Surrogate</b>	RANGE		2/3/2012
Tetrachloro-m-xylene (TCMX)	30-150%	95	2/3/2012
Decachlorobiphenyl	30-150%	96	2/3/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.272	82	2/3/2012
Aroclor-1260	mg/kg dry	0.33	0.309	94	2/3/2012
<b>Surrogate</b>	RANGE				2/3/2012
Tetrachloro-m-xylene (TCMX)	30-150%		95		2/3/2012
Decachlorobiphenyl	30-150%		110		2/3/2012



### CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 1/31/12  
**Date Reported:** 2/7/12  
**P.O. #:** 110829  
**Work Order #:** 1201-02023

---

**DESCRIPTION: PROJECT #110829 PROV. WATER AUTHORITY TREATMENT PLANT**

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

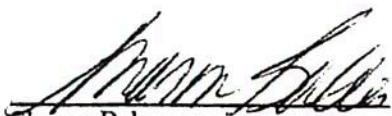
Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

  
Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/31/12

Work Order #: 1201-02023

PROJECT #110829 PROV. WATER AUTHORITY TREATMENT PLANT

Sample # 001

**SAMPLE DESCRIPTION:** SOUTH COURTYARD SURFACE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	12	1.2	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1260	13	1.2	mg/kg dry	SW-846 8082	2/7/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	88		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	82		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	17		%	SM2540 G.	2/1/12	THP

Sample # 002

**SAMPLE DESCRIPTION:** CENTER COURTYARD SURFACE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/3/12	JEB
Tetrachloro-m-xylene (TCMX)	88		30-150%	SW-846 8082	2/3/12	JEB
Decachlorobiphenyl	87		30-150%	SW-846 8082	2/3/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	11		%	SM2540 G.	2/1/12	THP

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)

Date Received: 1/31/12

Work Order #: 1201-02023

PROJECT #110829 PROV. WATER AUTHORITY TREATMENT PLANT

Sample # 003

SAMPLE DESCRIPTION: ACROSS FROM #3

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	13	1.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	102		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	93		30-150%	SW-846 8082	2/2/12	JEB
Extraction date		Extracted		SW846 3540	1/31/12	KAC
Moisture	11		%	SM2540 G.	2/1/12	THP

Sample # 004

SAMPLE DESCRIPTION: OPPOSIT #11

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	3.5	0.5	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	84		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	97		30-150%	SW-846 8082	2/2/12	JEB
Extraction date		Extracted		SW846 3540	1/31/12	KAC
Moisture	8		%	SM2540 G.	2/1/12	THP

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 1/31/12

Work Order #: 1201-02023

PROJECT #110829 PROV. WATER AUTHORITY TREATMENT PLANT

Sample # 005

**SAMPLE DESCRIPTION:** OPPOSIT #17**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1254	0.4	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/7/12	JEB
Surrogate			RANGE	SW-846 8082	2/7/12	JEB
Tetrachloro-m-xylene (TCMX)	99		30-150%	SW-846 8082	2/7/12	JEB
Decachlorobiphenyl	102		30-150%	SW-846 8082	2/7/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	12		%	SM2540 G.	2/1/12	THP



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1201-02023  
**Date:** 2/7/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/2/2012
Aroclor-1221	mg/kg dry	<0.1	2/2/2012
Aroclor-1232	mg/kg dry	<0.1	2/2/2012
Aroclor-1242	mg/kg dry	<0.1	2/2/2012
Aroclor-1248	mg/kg dry	<0.1	2/2/2012
Aroclor-1254	mg/kg dry	<0.1	2/2/2012
Aroclor-1260	mg/kg dry	<0.1	2/2/2012
<b>Surrogate</b>	RANGE		2/2/2012
Tetrachloro-m-xylene (TCMX)	30-150%	109	2/2/2012
Decachlorobiphenyl	30-150%	122	2/2/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.289	88	2/2/2012
Aroclor-1260	mg/kg dry	0.33	0.295	89	2/2/2012
<b>Surrogate</b>	RANGE				2/2/2012
Tetrachloro-m-xylene (TCMX)	30-150%		87		2/2/2012
Decachlorobiphenyl	30-150%		99		2/2/2012





## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 2/1/12  
Date Reported: 2/3/12  
P.O. #: 110829  
Work Order #: 1202-02116

---

**DESCRIPTION:** PROJECT #110829 PROV. WATER HOLTON PLANT

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

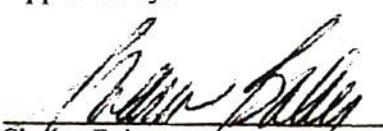
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Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may bc of further assistance, please contact our customer service department.

Approved by:



\_\_\_\_\_  
Shafon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/1/12

Work Order #: 1202-02116

**PROJECT #110829 PROV. WATER HOLTON PLANT**

Sample # 001

**SAMPLE DESCRIPTION:** 01-COMPOSITE 3-1A & 3-5A

**SAMPLE TYPE:** 2-GRAB/COMPOSITE

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	16	1.4	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	95		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	111		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	27		%	SM2540 G.	2/2/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 02-COMPOSITE 3-2A & 3-3A & 3-4A

**SAMPLE TYPE:** 3-GRAB/COMPOSITE

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	4.1	0.6	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	91		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	111		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	21		%	SM2540 G.	2/2/12	BJK

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/1/12

Work Order #: 1202-02116

**PROJECT #110829 PROV. WATER HOLTON PLANT**

Sample # 003

**SAMPLE DESCRIPTION:** 03-COMPOSITE 11-1A & 11-5A**SAMPLE TYPE:** 2-GRAB/COMPOSITE**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	4.0	0.6	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	93		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	108		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	JEB
Moisture	22		%	SM2540 G.	2/2/12	KAC
						BJK

Sample # 004

**SAMPLE DESCRIPTION:** 04-COMPOSITE 11-2A & 11-3A & 11-4A**SAMPLE TYPE:** 3-GRAB/COMPOSITE**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	5.5	0.6	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	83		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	91		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	21		%	SM2540 G.	2/2/12	BJK

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/1/12

Work Order #: 1202-02116

PROJECT #110829 PROV. WATER HOLTON PLANT

Sample # 005

**SAMPLE DESCRIPTION:** 05-COMPOSITE 12-1A & 12-5A**SAMPLE TYPE:** 2-GRAB/COMPOSITE**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
<b>PCB</b>						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	4.4	0.6	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	96		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	94		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	20		%	SM2540 G.	2/2/12	BJK

Sample # 006

**SAMPLE DESCRIPTION:** 06-COMPOSITE 12-2A & 12-3A & 12-4A**SAMPLE TYPE:** 3-GRAB/COMPOSITE**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
<b>PCB</b>						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1260	1.0	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/3/12	JEB
Tetrachloro-m-xylene (TCMX)	84		30-150%	SW-846 8082	2/3/12	JEB
Decachlorobiphenyl	78		30-150%	SW-846 8082	2/3/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	16		%	SM2540 G.	2/2/12	BJK

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)

Date Received: 2/1/12

Work Order #: 1202-02116

## PROJECT #110829 PROV. WATER HOLTON PLANT

Sample # 007

SAMPLE DESCRIPTION: 07-COMPOSITE 17-1 &amp; 17-5A

SAMPLE TYPE: 2-GRAB/COMPOSITE

SAMPLE DATE/TIME: 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	0.3	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Surrogate		RANGE		SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	79		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	81		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	35		%	SM2540 G.	2/2/12	BJK

Sample # 008

SAMPLE DESCRIPTION: 08-COMPOSITE 17-2A &amp; 17-3A &amp; 17-4A

SAMPLE TYPE: 3-GRAB/COMPOSITE

SAMPLE DATE/TIME: 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1221	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1232	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1242	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1248	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1254	<0.2	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Aroclor-1260	1.0	0.2	mg/kg dry	SW-846 8082	2/2/12	JEB
Surrogate		RANGE		SW-846 8082	2/2/12	JEB
Tetrachloro-m-xylene (TCMX)	74		30-150%	SW-846 8082	2/2/12	JEB
Decachlorobiphenyl	74		30-150%	SW-846 8082	2/2/12	JEB
Extraction date	Extracted			SW846 3540	1/31/12	KAC
Moisture	38		%	SM2540 G.	2/2/12	BJK



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-02116  
**Date:** 2/3/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/2/2012
Aroclor-1221	mg/kg dry	<0.1	2/2/2012
Aroclor-1232	mg/kg dry	<0.1	2/2/2012
Aroclor-1242	mg/kg dry	<0.1	2/2/2012
Aroclor-1248	mg/kg dry	<0.1	2/2/2012
Aroclor-1254	mg/kg dry	<0.1	2/2/2012
Aroclor-1260	mg/kg dry	<0.1	2/2/2012
<b>Surrogate</b>	RANGE		2/2/2012
Tetrachloro-m-xylene (TCMX)	30-150%	109	2/2/2012
Decachlorobiphenyl	30-150%	122	2/2/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.289	88	2/2/2012
Aroclor-1260	mg/kg dry	0.33	0.295	89	2/2/2012
<b>Surrogate</b>	RANGE				2/2/2012
Tetrachloro-m-xylene (TCMX)	30-150%		87		2/2/2012
Decachlorobiphenyl	30-150%		99		2/2/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 2/1/12  
Date Reported: 2/7/12  
P.O. #: 110829  
Work Order #: 1202-02119

---

**DESCRIPTION:** PROJECT #110829 PROV. WATER HOLTON PLANT

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015.  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read 'Joseph Lepore'.

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/1/12

Work Order #: 1202-02119

PROJECT #110829 PROV. WATER HOLTON PLANT

Sample # 001

**SAMPLE DESCRIPTION:** 3-6B-3FT OUT 1-4 INCHES

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/3/12	JEB
Tetrachloro-m-xylene (TCMX)	83		30-150%	SW-846 8082	2/3/12	JEB
Decachlorobiphenyl	99		30-150%	SW-846 8082	2/3/12	JEB
Extraction date	Extracted			SW846 3540	2/2/12	BJK
Moisture	14		%	SM2540 G.	2/2/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 11-6B-3FT OUT 1-4 INCHES

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/3/12	JEB
Tetrachloro-m-xylene (TCMX)	91		30-150%	SW-846 8082	2/3/12	JEB
Decachlorobiphenyl	89		30-150%	SW-846 8082	2/3/12	JEB
Extraction date	Extracted			SW846 3540	2/2/12	BJK
Moisture	13		%	SM2540 G.	2/2/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/1/12

Work Order #: 1202-02119

PROJECT #110829 PROV. WATER HOLTON PLANT

Sample # 003

**SAMPLE DESCRIPTION:** 12-6B-3FT OUT 1-4 INCHES

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/3/12	JEB
Tetrachloro-m-xylene (TCMX)	92		30-150%	SW-846 8082	2/3/12	JEB
Decachlorobiphenyl	95		30-150%	SW-846 8082	2/3/12	JEB
Extraction date		Extracted		SW846 3540	2/2/12	BJK
Moisture	11		%	SM2540 G.	2/2/12	BJK

Sample # 004

**SAMPLE DESCRIPTION:** 17-6B-3FT OUT 1-4 INCHES

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/3/12	JEB
Surrogate			RANGE	SW-846 8082	2/3/12	JEB
Tetrachloro-m-xylene (TCMX)	80		30-150%	SW-846 8082	2/3/12	JEB
Decachlorobiphenyl	91		30-150%	SW-846 8082	2/3/12	JEB
Extraction date		Extracted		SW846 3540	2/2/12	BJK
Moisture	9		%	SM2540 G.	2/2/12	BJK



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-02119  
**Date:** 2/7/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/3/2012
Aroclor-1221	mg/kg dry	<0.1	2/3/2012
Aroclor-1232	mg/kg dry	<0.1	2/3/2012
Aroclor-1242	mg/kg dry	<0.1	2/3/2012
Aroclor-1248	mg/kg dry	<0.1	2/3/2012
Aroclor-1254	mg/kg dry	<0.1	2/3/2012
Aroclor-1260	mg/kg dry	<0.1	2/3/2012
<b>Surrogate</b>	RANGE		2/3/2012
Tetrachloro-m-xylene (TCMX)	30-150%	95	2/3/2012
Decachlorobiphenyl	30-150%	96	2/3/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.272	82	2/3/2012
Aroclor-1260	mg/kg dry	0.33	0.309	94	2/3/2012
<b>Surrogate</b>	RANGE				2/3/2012
Tetrachloro-m-xylene (TCMX)	30-150%		95		2/3/2012
Decachlorobiphenyl	30-150%		110		2/3/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 2/7/12  
Date Reported: 2/10/12  
P.O. #: 110829  
Work Order #: 1202-02446

---

### DESCRIPTION: PROJECT #110829 PROVIDENCE WATER AUTH

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/7/12

Work Order #: 1202-02446

PROJECT #110829 PROVIDENCE WATER AUTH

Sample # 001

**SAMPLE DESCRIPTION:** 3-6A - 3FT OUT FROM WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1260	1.4	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Surrogate			RANGE	SW-846 8082	2/9/12	JEB
Tetrachloro-m-xylene (TCMX)	106		30-150%	SW-846 8082	2/9/12	JEB
Decachlorobiphenyl	78		30-150%	SW-846 8082	2/9/12	JEB
Extraction date	Extracted			SW846 3540	2/8/12	BJK
Moisture	18		%	SM2540 G.	2/8/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 11-6A - 3FT OUT FROM WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Aroclor-1260	0.4	0.1	mg/kg dry	SW-846 8082	2/9/12	JEB
Surrogate			RANGE	SW-846 8082	2/9/12	JEB
Tetrachloro-m-xylene (TCMX)	111		30-150%	SW-846 8082	2/9/12	JEB
Decachlorobiphenyl	77		30-150%	SW-846 8082	2/9/12	JEB
Extraction date	Extracted			SW846 3540	2/8/12	BJK
Moisture	15		%	SM2540 G.	2/8/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/7/12

Work Order #: 1202-02446

**PROJECT #110829 PROVIDENCE WATER AUTH**

Sample # 003

**SAMPLE DESCRIPTION:** 12-6A - 3FT OUT FROM WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1260	0.3	0.1	mg/kg dry	SW-846 8082	2/10/12	JFR
Surrogate				RANGE	SW-846 8082	2/10/12
Tetrachloro-m-xylene (TCMX)	72		30-150%	SW-846 8082	2/10/12	JEB
Decachlorobiphenyl	63		30-150%	SW-846 8082	2/10/12	JEB
Extraction date	Extracted			SW846 3540	2/8/12	JEB
Moisture	20		%	SM2540 G.	2/8/12	BJK

Sample # 004

**SAMPLE DESCRIPTION:** 17-6A - 3FT OUT FROM WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1260	0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Surrogate				RANGE	SW-846 8082	2/10/12
Tetrachloro-m-xylene (TCMX)	72		30-150%	SW-846 8082	2/10/12	JEB
Decachlorobiphenyl	63		30-150%	SW-846 8082	2/10/12	JEB
Extraction date	Extracted			SW846 3540	2/8/12	JEB
Moisture	17		%	SM2540 G.	2/8/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/7/12

Work Order #: 1202-02446

PROJECT #110829 PROVIDENCE WATER AUTH

Sample # 005

**SAMPLE DESCRIPTION:** 11-3 PAPER

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.2	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1221	<0.2	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1232	<0.2	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1242	<0.2	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1248	<0.2	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1254	<0.2	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1260	1.9	0.2	mg/kg dry	SW-846 8082	2/10/12	JEB
Surrogate			RANGE	SW-846 8082	2/10/12	JEB
Tetrachloro-m-xylene (TCMX)	98		30-150%	SW-846 8082	2/10/12	JEB
Decachlorobiphenyl	86		30-150%	SW-846 8082	2/10/12	JFR
Extraction date	Extracted			SW846 3540	2/8/12	BJK
Moisture	47		%	SM2540 G.	2/8/12	BJK



**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/7/12

Work Order #: 1202-02449

**PROJECT #110829 PROVIDENCE WATER AUTH**

Sample # 001

**SAMPLE DESCRIPTION:** 3-7B @ FOUNDATION 4 INCH DEPTH**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Surrogate						
Tetrachloro-m-xylene (TCMX)	96		30-150%	SW-846 8082	2/10/12	JEB
Decachlorobiphenyl	79		30-150%	SW-846 8082	2/10/12	JEB
Extraction date	Extracted			SW846 3540	2/8/12	JEB
Moisture	12		%	SM2540 G.	2/8/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 11-7B @ FOUNDATION 4 INCH DEPTH**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 1/30/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/10/12	JEB
Surrogate						
Tetrachloro-m-xylene (TCMX)	111		30-150%	SW-846 8082	2/10/12	JEB
Decachlorobiphenyl	98		30-150%	SW-846 8082	2/10/12	JEB
Extraction date	Extracted			SW846 3540	2/8/12	JEB
Moisture	11		%	SM2540 G.	2/8/12	BJK



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-02449  
**Date:** 2/10/12

### -Method Blanks Results-

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/9/2012
Aroclor-1221	mg/kg dry	<0.1	2/9/2012
Aroclor-1232	mg/kg dry	<0.1	2/9/2012
Aroclor-1242	mg/kg dry	<0.1	2/9/2012
Aroclor-1248	mg/kg dry	<0.1	2/9/2012
Aroclor-1254	mg/kg dry	<0.1	2/9/2012
Aroclor-1260	mg/kg dry	<0.1	2/9/2012
<b>Surrogate</b>		RANGE	2/9/2012
Tetrachloro-m-xylene (TCMX)	30-150%	117	2/9/2012
Decachlorobiphenyl	30-150%	105	2/9/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.363	110	2/9/2012
Aroclor-1260	mg/kg dry	0.33	0.367	111	2/9/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE				2/9/2012
Decachlorobiphenyl	30-150%		111		2/9/2012
	30-150%		101		2/9/2012

### -Matrix Spike Results-



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 2/10/12  
**Date Reported:** 2/15/12  
**P.O. #:** 110829  
**Work Order #:** 1202-02855

---

**DESCRIPTION:** PROJECT #110829 PROVIDENCE WATER HOLTON PLANT

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.

The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



\_\_\_\_\_  
Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)

Date Received: 2/10/12

Work Order #: 1202-02855

## PROJECT #110829 PROVIDENCE WATER HOLTON PLANT

Sample # 001

**SAMPLE DESCRIPTION:** 1-FILTER 3 COMPOSITE 2B-3B-4B**SAMPLE TYPE:** COMPOSITE**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Surrogate		RANGE		SW-846 8082	2/15/12	JEB
Tetrachloro-m-xylene (TCMX)	68		30-150%	SW-846 8082	2/15/12	JEB
Decachlorobiphenyl	61		30-150%	SW-846 8082	2/15/12	JEB
Extraction date		Extracted		SW846 3540	2/14/12	THP
Moisture	11		%	SM2540 G.	2/14/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 2-FILTER 11 COMPOSITE 2B-3B-4B**SAMPLE TYPE:** COMPOSITE**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Surrogate		RANGE		SW-846 8082	2/15/12	JEB
Tetrachloro-m-xylene (TCMX)	94		30-150%	SW-846 8082	2/15/12	JEB
Decachlorobiphenyl	78		30-150%	SW-846 8082	2/15/12	JEB
Extraction date		Extracted		SW846 3540	2/14/12	THP
Moisture	10		%	SM2540 G.	2/14/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/10/12

Work Order #: 1202-02855

PROJECT #110829 PROVIDENCE WATER HOLTON PLANT

Sample # 003

**SAMPLE DESCRIPTION:** 3-FILTER 12 COMPOSITE 2B-3B-4B

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8092	2/15/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Surrogate			RANGE	SW-846 8082	2/15/12	JEB
Tetrachloro-m-xylene (TCMX)	84		30-150%	SW-846 8082	2/15/12	JEB
Decachlorobiphenyl	76		30-150%	SW-846 8082	2/15/12	JEB
Extraction date	Extracted			SW-846 3540	2/14/12	THP
Moisture	10		%	SM2540 G.	2/14/12	BJK

Sample # 004

**SAMPLE DESCRIPTION:** 4-FILTER 17 COMPOSITE 2B-3B-4B

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8092	2/15/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	2/15/12	JEB
Surrogate			RANGE	SW-846 8082	2/15/12	JEB
Tetrachloro-m-xylene (TCMX)	73		30-150%	SW-846 8082	2/15/12	JEB
Decachlorobiphenyl	78		30-150%	SW-846 8082	2/15/12	JEB
Extraction date	Extracted			SW-846 3540	2/14/12	THP
Moisture	7		%	SM2540 G.	2/14/12	BJK



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-02855  
**Date:** 2/15/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/15/2012
Aroclor-1221	mg/kg dry	<0.1	2/15/2012
Aroclor-1232	mg/kg dry	<0.1	2/15/2012
Aroclor-1242	mg/kg dry	<0.1	2/15/2012
Aroclor-1248	mg/kg dry	<0.1	2/15/2012
Aroclor-1254	mg/kg dry	<0.1	2/15/2012
Aroclor-1260	mg/kg dry	<0.1	2/15/2012
<b>Surrogate</b>	RANGE		2/15/2012
Tetrachloro-m-xylene (TCMX)	30-150%	76	2/15/2012
Decachlorobiphenyl	30-150%	72	2/15/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.199	60	2/15/2012
Aroclor-1260	mg/kg dry	0.33	0.193	58	2/15/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	30-150%		76		2/15/2012
Decachlorobiphenyl	30-150%		62		2/15/2012
Aroclor-1016	mg/kg dry	0.33	0.222	67	2/15/2012
Aroclor-1260	mg/kg dry	0.33	0.224	68	2/15/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	30-150%		72		2/15/2012
Decachlorobiphenyl	30-150%		69		2/15/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 2/14/12  
**Date Reported:** 2/17/12  
**P.O. #:** 110829  
**Work Order #:** 1202-02991

---

**DESCRIPTION:** PROJECT #110829 PROV. WATER PLANT HOLTON

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

  
\_\_\_\_\_  
Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/14/12

Work Order #: 1202-02991

PROJECT #110829 PROV. WATER PLANT HOLTON

Sample # 001

**SAMPLE DESCRIPTION:** COMPOSITE 3-1A & 3-5A (1202-02116-001)

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 1/30/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.7	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Aroclor-1221	<0.7	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Aroclor-1232	<0.7	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Aroclor-1242	<0.7	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Aroclor-1248	<0.7	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Aroclor-1254	<0.7	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Aroclor-1260	17	0.7	mg/kg dry	SW-846 8082	2/17/12	JEB
Surrogate			RANGE	SW-846 8082	2/16/12	JEB
Tetrachloro-m-xylene (TCMX)	81		30-150%	SW-846 8082	2/16/12	JEB
Decachlorobiphenyl	71		30-150%	SW-846 8082	2/16/12	JEB
Extraction date	Extracted			SW846 3540	2/15/12	THP
Moisture	27		%	SM2540 G.	2/14/12	BJK



## CHAIN OF CUSTODY RECORD

41 Illinois Avenue

Warwick, RI 02888-3007

800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105  
Hudson, MA 01749-1331

PCB

53

### Field Sample Identification

Date Collected: 3/14/12 Time Collected: 3-14 # 3-5A

### Grab or Composite

# of Containers &amp; Type:

NP

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Preservation Code:

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atrix Code:

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Project Comments			
3 Composite Samples made on the 14/5/2012			
Temp. Upon Receipt: 14 °C			

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Client: R.I. Analytical (EAM Division)  
 WO #: 1202-02991  
 Date: 2/17/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.05	2/16/2012
Aroclor-1221	mg/kg dry	<0.05	2/16/2012
Aroclor-1232	mg/kg dry	<0.05	2/16/2012
Aroclor-1242	mg/kg dry	<0.05	2/16/2012
Aroclor-1248	mg/kg dry	<0.05	2/16/2012
Aroclor-1254	mg/kg dry	<0.05	2/16/2012
Aroclor-1260	mg/kg dry	<0.05	2/16/2012
<b>Surrogate</b>	RANGE		2/16/2012
Tetrachloro-m-xylene (TCMX)	30-150%	93	2/16/2012
Decachlorobiphenyl	30-150%	73	2/16/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.297	90	2/16/2012
Aroclor-1260	mg/kg dry	0.33	0.289	88	2/16/2012
<b>Surrogate</b>	RANGE				2/16/2012
Tetrachloro-m-xylene (TCMX)	30-150%		97		2/16/2012
Decachlorobiphenyl	30-150%		74		2/16/2012
Aroclor-1016	mg/kg dry	0.33	0.287	87	2/16/2012
Aroclor-1260	mg/kg dry	0.33	0.293	89	2/16/2012
<b>Surrogate</b>	RANGE				2/16/2012
Tetrachloro-m-xylene (TCMX)	30-150%		93		2/16/2012
Decachlorobiphenyl	30-150%		79		2/16/2012

**-Duplicate Sample Results-**

Parameter	Units	Sample #	Rep 1 Conc.	Rep 2 Conc.	Mean Conc.	Reported Value	% RPD	Date Analyzed
<b>PCB'S</b>								
Aroclor-1016	mg/kg dry	1202-02991-001	<0.7	<0.7	<0.7	<0.7	0	2/17/2012
Aroclor-1221	mg/kg dry	1202-02991-001	<0.7	<0.7	<0.7	<0.7	0	2/17/2012
Aroclor-1232	mg/kg dry	1202-02991-001	<0.7	<0.7	<0.7	<0.7	0	2/17/2012
Aroclor-1242	mg/kg dry	1202-02991-001	<0.7	<0.7	<0.7	<0.7	0	2/17/2012
Aroclor-1248	mg/kg dry	1202-02991-001	<0.7	<0.7	<0.7	<0.7	0	2/17/2012
Aroclor-1254	mg/kg dry	1202-02991-001	<0.7	<0.7	<0.7	<0.7	0	2/17/2012
Aroclor-1260	mg/kg dry	1202-02991-001	26	17	21	17	41	2/17/2012
Tetrachloro-m-xylene (TCMX)	30-150%	1202-02991-001	82	81		81		2/16/2012
Decachlorobiphenyl	30-150%	1202-02991-001	64	71		71		2/16/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 2/20/12  
Date Reported: 2/24/12  
P.O. #: 110829  
Work Order #: 1202-03413

---

**DESCRIPTION:** PROJECT# 110829 PROVIDENCE WATER SUPPLY

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

  
\_\_\_\_\_  
Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/20/12

Work Order #: 1202-03413

PROJECT# 110829 PROVIDENCE WATER SUPPLY

Sample # 001

SAMPLE DESCRIPTION: WALL EXPANSION JOINT NE CORNER

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/20/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.5	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1260	2.4	0.5	mg/kg	SW-846 8082	2/22/12	JEB
Surrogate			RANGE	SW-846 8082	2/22/12	JEB
Tetrachloro-m-xylene (TCMX)	54		30-150%	SW-846 8082	2/22/12	JEB
Decachlorobiphenyl	106		30-150%	SW-846 8082	2/22/12	JEB
Extraction date		Extracted		SW846 3540	2/21/12	BJK
Moisture	N/A		%	SM2540 G.	2/21/12	BJK

Sample # 002

SAMPLE DESCRIPTION: WHITE HATCH CAULKING

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/20/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<1.6	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1221	<1.6	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1232	<1.6	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1242	<1.6	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1248	<1.6	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1254	<1.6	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1260	11	1.6	mg/kg	SW-846 8082	2/22/12	JEB
Surrogate			RANGE	SW-846 8082	2/22/12	JEB
Tetrachloro-m-xylene (TCMX)	132		30-150%	SW-846 8082	2/22/12	JEB
Decachlorobiphenyl	124		30-150%	SW-846 8082	2/22/12	JEB
Extraction date		Extracted		SW846 3540	2/21/12	BJK
Moisture	N/A		%	SM2540 G.	2/21/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/20/12

Work Order #: 1202-03413

PROJECT# 110829 PROVIDENCE WATER SUPPLY

Sample # 003

**SAMPLE DESCRIPTION:** BLACK HATCH CAULKING

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/20/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.2	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1221	<0.2	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1232	<0.2	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1242	<0.2	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1248	<0.2	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1254	<0.2	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Aroclor-1260	2.0	0.2	mg/kg	SW-846 8082	2/22/12	JEB
Surrogate			RANGE	SW-846 8082	2/22/12	JEB
Tetrachloro-m-xylene (TCMX)	124		30-150%	SW-846 8082	2/22/12	JEB
Decachlorobiphenyl	63		30-150%	SW-846 8082	2/22/12	JEB
Extraction date	Extracted			SW846 3540	2/21/12	BJK
Moisture	N/A		%	SM2540 G.	2/21/12	BJK



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-03413  
**Date:** 2/24/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/22/2012
Aroclor-1221	mg/kg dry	<0.1	2/22/2012
Aroclor-1232	mg/kg dry	<0.1	2/22/2012
Aroclor-1242	mg/kg dry	<0.1	2/22/2012
Aroclor-1248	mg/kg dry	<0.1	2/22/2012
Aroclor-1254	mg/kg dry	<0.1	2/22/2012
Aroclor-1260	mg/kg dry	<0.1	2/22/2012
<b>Surrogate</b>	RANGE		2/22/2012
Tetrachloro-m-xylene (TCMX)	30-150%	119	2/22/2012
Decachlorobiphenyl	30-150%	98	2/22/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.300	91	2/22/2012
Aroclor-1260	mg/kg dry	0.33	0.317	96	2/22/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE				2/22/2012
Decachlorobiphenyl	30-150%		109		2/22/2012
	30-150%		87		2/22/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 2/28/12  
Date Reported: 3/1/12  
P.O. #: 110829  
Work Order #: 1202-03973

---

### DESCRIPTION: PROJECT #110829 PROVIDENCE WATER AUTHORITY

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

  
\_\_\_\_\_  
Sharon Baker

MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/28/12

Work Order #: 1202-03973

**PROJECT #110829 PROVIDENCE WATER AUTHORITY**

Sample # 001

**SAMPLE DESCRIPTION:** FILTER #3 SURFACE 42 INCHES OUT**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 2/28/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	2/29/12	JER
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	2/29/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	2/29/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	2/29/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	2/29/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	2/29/12	JEB
Aroclor-1260	1.0	0.1	mg/kg dry	SW-846 8082	2/29/12	JEB
Surrogate			RANGE	SW-846 8082	2/29/12	JEB
Tetrachloro-m-xylene (TCMX)	74		30-150%	SW-846 8082	2/29/12	JEB
Decachlorobiphenyl	73		30-150%	SW-846 8082	2/29/12	JEB
Extraction date	Extracted			SW-846 3540	2/28/12	JEB
Moisture	17		%	SM2540 G.	2/29/12	THP
						BJK

Project #110829

Prov. Water Authority



**CHAIN OF CUSTODY RECORD**

**CHAIN OF CUSTODY RECORD**

41 Illinois Avenue Warwick, RI 02888-3007 800-937-2580 • Fax: 401-738-1970	131 Coolidge St., Suite 105 Hudson, MA 01749-1331 800-937-2580 • Fax: 978-568-0078	Date Collected	Time	Field Sample Identification
2/28/12				Filter #3 Surface 42 inches out

R.I. ANALYTICAL Solutions Environmental Services					
CHAIN OF CUSTODY RECORD					
41 Illinois Avenue Warwick, RI 02888-3007 800-937-2580 • Fax: 401-738-1970	131 Coolidge St., Suite 105 Hudson, MA 01749-1331 800-937-2580 • Fax: 978-568-0078	Time Collected	Field Sample Identification	# of Contaminants & Type of Preservation Code	Matrix Code & Lab Source Code
2/28/12	Filter #3 Surface 42 inlets out	G 1 NPS +			

Client Information		Project Information		
Company Name:	<u>REAL (SAM)</u>	Project Name:	<u>Rev. Water Audit/cty</u>	
Address:	<u>417 Third Ave</u>	P.O. Number:		
City / State / Zip:	<u>Worcester, MA 01652</u>	Report To:		
Telephone:		Phone:		
Contact Person:		Fax:		
		Sampled By:	Email report to these addresses:	
		Quote No.:		
Rerigualished By Signatures		Date	Time	Received By Signatures
		<u>2/28/12</u>	<u>1535</u>	<u>M. Meltin</u>

Project Comments						
Circle if applicable:	GW-1,	GW-2,	GW-3,	S-1,	S-2,	S-3
						MCP Data Enhancement QC Package?
						Yes      No
1/10/82 9						
Temp. Upon Receipt <u>21.2 °C</u>						
Container: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MeOH, N=None, NP=NaNO3, SH=NaHSO4, SB=NaHSO4, SW=NaOH, T=Na2SO4, Z=ZnOAc Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=						
Workorder No <u>120202-03673</u> Page <u>1</u> of <u>1</u>						

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-03973  
**Date:** 3/1/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	2/29/2012
Aroclor-1221	mg/kg dry	<0.1	2/29/2012
Aroclor-1232	mg/kg dry	<0.1	2/29/2012
Aroclor-1242	mg/kg dry	<0.1	2/29/2012
Aroclor-1248	mg/kg dry	<0.1	2/29/2012
Aroclor-1254	mg/kg dry	<0.1	2/29/2012
Aroclor-1260	mg/kg dry	<0.1	2/29/2012
<b>Surrogate</b>	RANGE		2/29/2012
Tetrachloro-m-xylene (TCMX)	30-150%	85	2/29/2012
Decachlorobiphenyl	30-150%	90	2/29/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.242	73	2/29/2012
Aroclor-1260	mg/kg dry	0.33	0.261	79	2/29/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	30-150%		81	2/29/2012	
Decachlorobiphenyl	30-150%		82	2/29/2012	



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 2/29/12  
Date Reported: 3/5/12  
P.O. #: 110829  
Work Order #: 1202-04045

---

**DESCRIPTION:** PROJECT #110829 PROV. WATER AUTHORITY - SCITUATE, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature of Sharon Baker is shown above her typed name.

Sharon Baker

MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/29/12

Work Order #: 1202-04045

PROJECT #110829 PROV. WATER AUTHORITY - SCITUATE, RI

Sample # 001

**SAMPLE DESCRIPTION:** 01: SILL CAULK MID WINDOW N-SIDE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/28/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<41	41	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<41	41	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<41	41	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<41	41	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	1800	41	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<41	41	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	1600	41	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate		RANGE		SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	3/2/12	JEB
Extraction date	Extracted			SW846 3540	2/29/12	JEB
Moisture	Not Applicable		%	SM2540 G.	3/1/12	BJK

DL = Surrogate diluted below instrument calibration range.

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/29/12

Work Order #: 1202-04045

PROJECT #110829 PROV. WATER AUTHORITY - SCITUATE, RI

Sample # 002

**SAMPLE DESCRIPTION:** 02: CAULK MID WINDOW N-SIDE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/28/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<31	31	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<31	31	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<31	31	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<31	31	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	150	31	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<31	31	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	820	31	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate			RANGE	SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	DL		30-150%	SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	DL		30-150%	SW-846 8082	3/2/12	JEB
Extraction date			Extracted	SW846 3540	3/2/12	JEB
Moisture	Not Applicable		%	SM2540 G.	2/29/12	BJK
					3/1/12	BJK

DL = Surrogate diluted below instrument calibration range.

Sample # 003

**SAMPLE DESCRIPTION:** 03: DOOR CAULK N-SIDE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/28/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate			RANGE	SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	86		30-150%	SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	126		30-150%	SW-846 8082	3/2/12	JEB
Extraction date			Extracted	SW846 3540	3/2/12	JEB
Moisture	Not Applicable		%	SM2540 G.	2/29/12	BJK
					3/1/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/29/12

Work Order #: 1202-04045

PROJECT #110829 PROV. WATER AUTHORITY - SCITUATE, RI

Sample # 004

**SAMPLE DESCRIPTION:** 04: PANEL CAULK OPS BLDG. N-SIDE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/28/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<3.6	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<3.6	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<3.6	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<3.6	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	<3.6	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<3.6	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	57	3.6	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate			RANGE	SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	100		30-150%	SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	120		30-150%	SW-846 8082	3/2/12	JEB
Extraction date		Extracted		SW846 3540	2/29/12	JEB
Moisture		Not Applicable	%	SM2540 G.	3/1/12	BJK

Sample # 005

**SAMPLE DESCRIPTION:** 05: PANEL CAULK N-SIDE

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/28/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<5	5	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<5	5	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<5	5	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<5	5	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	<5	5	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<5	5	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	120	5	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate			RANGE	SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	100		30-150%	SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	120		30-150%	SW-846 8082	3/2/12	JEB
Extraction date		Extracted		SW846 3540	2/29/12	BJK
Moisture		Not Applicable	%	SM2540 G.	3/1/12	BJK

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/29/12

Work Order #: 1202-04045

PROJECT #110829 PROV. WATER AUTHORITY - SCITUATE, RI

Sample # 006

**SAMPLE DESCRIPTION:** 06: GRANITE LEDGE DOOR**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 2/28/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
PCB						
Aroclor-1016	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	<0.7	0.7	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate			RANGE	SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	79		30-150%	SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	94		30-150%	SW-846 8082	3/2/12	JEB
Extraction date	Extracted			SW846 3540	2/29/12	BJK
Moisture	Not Applicable		%	SM2540 G.	3/1/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 2/29/12

Work Order #: 1202-04045

PROJECT #110829 PROV. WATER AUTHORITY - SCITUATE, RI

Sample # 007

**SAMPLE DESCRIPTION:** 07: BLACK WATER PROOFING

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 2/28/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.9	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1221	<0.9	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1232	<0.9	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1242	<0.9	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1248	<0.9	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1254	<0.9	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Aroclor-1260	1.1	0.9	mg/kg	SW-846 8082	3/2/12	JEB
Surrogate		RANGE		SW-846 8082	3/2/12	JEB
Tetrachloro-m-xylene (TCMX)	76	30-150%		SW-846 8082	3/2/12	JEB
Decachlorobiphenyl	89	30-150%		SW-846 8082	3/2/12	JEB
Extraction date	Extracted			SW846 3540	2/29/12	JEB
Moisture	Not Applicable	%		SM2540 G.	3/1/12	BJK

Project #110829

Prov. Water Authority

Scituate, RI



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1202-04045  
**Date:** 3/5/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.05	3/2/2012
Aroclor-1221	mg/kg dry	<0.05	3/2/2012
Aroclor-1232	mg/kg dry	<0.05	3/2/2012
Aroclor-1242	mg/kg dry	<0.05	3/2/2012
Aroclor-1248	mg/kg dry	<0.05	3/2/2012
Aroclor-1254	mg/kg dry	<0.05	3/2/2012
Aroclor-1260	mg/kg dry	<0.05	3/2/2012
<b>Surrogate</b>	RANGE		3/2/2012
Tetrachloro-m-xylene (TCMX)	30-150%	21*	3/2/2012
Decachlorobiphenyl	30-150%	24*	3/2/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.191	58	3/2/2012
Aroclor-1260	mg/kg dry	0.33	0.265	80	3/2/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	30-150%		75	3/2/2012	
Decachlorobiphenyl	30-150%		96	3/2/2012	





## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 3/12/12  
**Date Reported:** 3/14/12  
**P.O. #:** 110829  
**Work Order #:** 1203-04964

---

**DESCRIPTION:** PROJECT# 110829 PROV. WATER SUPPLY

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read "Sharon Baker".

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04964

PROJECT# 110829 PROV. WATER SUPPLY

Sample # 001

**SAMPLE DESCRIPTION:** 1A FILTER 3 UNCLEANED

**SAMPLE TYPE:** Wipe

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1221	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1232	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1242	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1248	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1254	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1260	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Extraction date	Extracted			SW846 3546	3/13/12	THP
Moisture	n/a		%	SM2540 G.	3/13/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 1B FILTER 3 CLEANED

**SAMPLE TYPE:** Wipe

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1221	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1232	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1242	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1248	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1254	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1260	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Extraction date	Extracted			SW846 3546	3/13/12	THP
Moisture	n/a		%	SM2540 G.	3/13/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04964

PROJECT# 110829 PROV. WATER SUPPLY

Sample # 003

**SAMPLE DESCRIPTION:** 2A FILTER 4 UNCLEANED

**SAMPLE TYPE:** Wipe

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1221	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1232	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1242	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1248	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1254	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1260	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Extraction date	Extracted			SW846 3546	3/13/12	THP
Moisture	n/a		%	SM2540 G.	3/13/12	BJK

Sample # 004

**SAMPLE DESCRIPTION:** 2B FILTER 4 CLEANED

**SAMPLE TYPE:** Wipe

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1221	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1232	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1242	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1248	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1254	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1260	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Extraction date	Extracted			SW846 3546	3/13/12	THP
Moisture	n/a		%	SM2540 G.	3/13/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04964

PROJECT# 110829 PROV. WATER SUPPLY

Sample # 005

**SAMPLE DESCRIPTION:** 3 BLANK

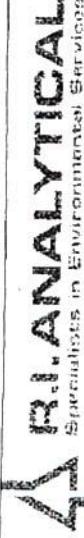
**SAMPLE TYPE:** Wipe

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>PCB</b>						
Aroclor-1016	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1221	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1232	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1242	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1248	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1254	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Aroclor-1260	<1	1	ug/100cm^2	SW-846 8082	3/14/12	JEB
Extraction date	Extracted			SW846 3546	3/13/12	THP
Moisture	n/a		%	SM2540 G.	3/13/12	BJK

Project# 110829

Prov. Water Supply



# CHAIN OF CUSTODY RECORD

41 Illinois Avenue

Warwick, RI 02888-3007

800-937-2580 • Fax: 401-738-1970

131 Coolidge St., Suite 105

Hudson, MA 01749-1331

800-937-2580 • Fax: 978-568-0078

Matrix Code A

100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>100cm<sup>2</sup>

Specialists in Environmental Services

RI ANALYTICAL

Environmental Services

Project Name:

41 Illinois Avenue

Project Number:

11/25/29

Report To:

CAM

Phone:

Fax

Sample By:

3/27/29

Email report

to these

addresses:

Quote No.:

Client: R.I. Analytical (EAM Division)  
 WO #: 1203-04964  
 Date: 3/14/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB's</b>			
Aroclor-1016	ug/100cm^2	<1	3/14/2012
Aroclor-1221	ug/100cm^2	<1	3/14/2012
Aroclor-1232	ug/100cm^2	<1	3/14/2012
Aroclor-1242	ug/100cm^2	<1	3/14/2012
Aroclor-1248	ug/100cm^2	<1	3/14/2012
Aroclor-1254	ug/100cm^2	<1	3/14/2012
Aroclor-1260	ug/100cm^2	<1	3/14/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB's</b>					
Aroclor-1016	ug/100cm^2	5.0	4.28	86	3/14/2012
Aroclor-1260	ug/100cm^2	5.0	4.17	83	3/14/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 3/12/12  
Date Reported: 3/14/12  
P.O. #: 110829  
Work Order #: 1203-04965

---

**DESCRIPTION:** PROJECT# 110829 PROV. WATER AUTH SCITUATE

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature of "Sharon Baker" is written over a horizontal line.

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04965

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 001

**SAMPLE DESCRIPTION:** 1) FILTER SOIL AWAY FROM BLDG. 0-4 INCHES

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Surrogate			RANGE	SW-846 8082	3/14/12	JEB
Tetrachloro-m-xylene (TCMX)	78		30-150%	SW-846 8082	3/14/12	JEB
Decachlorobiphenyl	76		30-150%	SW-846 8082	3/14/12	JEB
Extraction date		Extracted		SW846 3540	3/13/12	JEB
Moisture	14		%	SM2540 G.	3/13/12	THP
						BJK

Sample # 002

**SAMPLE DESCRIPTION:** 2) FILTER SOIL AWAY FROM BLDG. 4-10 INCHES

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082	3/14/12	JEB
Surrogate			RANGE	SW-846 8082	3/14/12	JEB
Tetrachloro-m-xylene (TCMX)	77		30-150%	SW-846 8082	3/14/12	JEB
Decachlorobiphenyl	75		30-150%	SW-846 8082	3/14/12	JEB
Extraction date		Extracted		SW846 3540	3/13/12	JEB
Moisture	12		%	SM2540 G.	3/13/12	THP
						BJK

Project# 110829

Prov. Water Authority Scituate



**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-04965  
**Date:** 3/14/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	3/14/2012
Aroclor-1221	mg/kg dry	<0.1	3/14/2012
Aroclor-1232	mg/kg dry	<0.1	3/14/2012
Aroclor-1242	mg/kg dry	<0.1	3/14/2012
Aroclor-1248	mg/kg dry	<0.1	3/14/2012
Aroclor-1254	mg/kg dry	<0.1	3/14/2012
Aroclor-1260	mg/kg dry	<0.1	3/14/2012
<b>Surrogate</b>	RANGE		3/14/2012
Tetrachloro-m-xylene (TCMX)	30-150%	92	3/14/2012
Decachlorobiphenyl	30-150%	95	3/14/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.285	86	3/14/2012
Aroclor-1260	mg/kg dry	0.33	0.278	84	3/14/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE				3/14/2012
Decachlorobiphenyl	30-150%		95		3/14/2012
	30-150%		88		3/14/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 3/12/12  
**Date Reported:** 3/20/12  
**P.O. #:** 110829  
**Work Order #:** 1203-04966

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**DESCRIPTION:** PROJECT# 110829 PROV. WATER AUTH SCITUATE

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Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

**Reference:** All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature of "Sharon Baker" is shown above her printed title.

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 001

**SAMPLE DESCRIPTION:** 1) FILTER SOIL AWAY FROM BLDG. 0-4 INCHES

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Reactivity CN &amp; S Soils</b>						
Sulfide reactivity	<2.5	2.5	mg/kg	SW-846 7.3.4	3/15/12	ML
Cyanide Reactivity	<0.10	0.10	mg/kg	SW-846 7.3.3	3/15/12	ML
<b>PAH</b>						
Naphthalene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Acenaphthylene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Acenaphthene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Fluorene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Phenanthrene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Anthracene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Fluoranthene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Pyrene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(a)anthracene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Chrysene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(b)fluoranthene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(k)fluoranthene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(a)pyrene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Indeno(1,2,3-cd)pyrene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Dibenzo(a,h)anthracene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(g,h,i)perylene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
2-Methylnaphthalene	<0.34	0.34	mg/kg dry	SW-846 8270D	3/16/12	TCL
Moisture	14		%	SM2540 G.	3/15/12	BJK
Surrogates			RANGE	SW-846 8270D	3/16/12	TCL
Nitrobenzene-d5	59		30-130%	SW-846 8270D	3/16/12	TCL
2-Fluorobiphenyl	64		30-130%	SW-846 8270D	3/16/12	TCL
P-Terphenyl-d14	105		30-130%	SW-846 8270D	3/16/12	TCL
Extraction date	Extracted			SW846 3546	3/15/12	THP
<b>Total Metals</b>						
Antimony	<5.51	5.51	mg/kg dry	SW-846 6010	3/16/12	PJC
Arsenic	<2.8	2.8	mg/kg dry	SW-846 6010	3/16/12	PJC
Beryllium	<0.055	0.055	mg/kg dry	SW-846 6010	3/16/12	PJC
Cadmium	<0.28	0.28	mg/kg dry	SW-846 6010	3/16/12	PJC
Chromium	3.0	1.6	mg/kg dry	SW-846 6010	3/16/12	PJC
Copper	13	2.8	mg/kg dry	SW-846 6010	3/16/12	PJC

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 001

**SAMPLE DESCRIPTION:** 1) FILTER SOIL AWAY FROM BLDG. 0-4 INCHES

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Lead	16	2.2	mg/kg dry	SW-846 6010	3/16/12	PJC
Mercury	<0.10	0.10	mg/kg dry	SW-846 7471A	3/16/12	SUB
Nickel	2.6	1.1	mg/kg dry	SW-846 6010	3/16/12	PJC
Selenium	<3	3	mg/kg dry	SW-846 6010	3/16/12	PJC
Silver	<1.1	1.1	mg/kg dry	SW-846 6010	3/16/12	PJC
Thallium	<2.8	2.8	mg/kg dry	SW-846 6010	3/16/12	PJC
Zinc	38	2.2	mg/kg dry	SW-846 6010	3/16/12	PJC

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 002

SAMPLE DESCRIPTION: 2) FILTER SOIL AWAY FROM BLDG. 4-10 INCHES

SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Reactivity CN &amp; S Soils</b>						
Sulfide reactivity	<2.5	2.5	mg/kg	SW-846 7.3.4	3/15/12	ML
Cyanide Reactivity	<0.10	0.10	mg/kg	SW-846 7.3.3	3/15/12	ML
<b>PAH</b>						
Naphthalene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Acenaphthylene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Acenaphthene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Fluorene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Phenanthrene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Anthracene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Fluoranthene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Pyrene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(a)anthracene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Chrysene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(b)fluoranthene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(k)fluoranthene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(a)pyrene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Indeno(1,2,3-cd)pyrene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Dibenz(a,h)anthracene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Benzo(g,h,i)perylene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
2-Methylnaphthalene	<0.38	0.38	mg/kg dry	SW-846 8270D	3/16/12	TCL
Moisture	12	%		SM2540 G.	3/15/12	BJK
Surrogates		RANGE		SW-846 8270D	3/16/12	TCL
Nitrobenzene-d5	54	30-130%		SW-846 8270D	3/16/12	TCL
2-Fluorobiphenyl	56	30-130%		SW-846 8270D	3/16/12	TCL
P-Terphenyl-d14	90	30-130%		SW-846 8270D	3/16/12	TCL
Extraction date	Extracted			SW846 3546	3/15/12	THP
<b>Total Metals</b>						
Antimony	<4.46	4.46	mg/kg dry	SW-846 6010	3/16/12	PJC
Arsenic	<2.2	2.2	mg/kg dry	SW-846 6010	3/16/12	PJC
Beryllium	<0.045	0.045	mg/kg dry	SW-846 6010	3/16/12	PJC
Cadmium	<0.22	0.22	mg/kg dry	SW-846 6010	3/16/12	PJC
Chromium	<1.3	1.3	mg/kg dry	SW-846 6010	3/16/12	PJC
Copper	4.0	2.2	mg/kg dry	SW-846 6010	3/16/12	PJC

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 002

**SAMPLE DESCRIPTION:** 2) FILTER SOIL AWAY FROM BLDG. 4-10 INCHES

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Lead	5.4	1.8	mg/kg dry	SW-846 6010	3/16/12	PJC
Mercury	<0.089	0.089	mg/kg dry	SW-846 7471A	3/16/12	SUB
Nickel	0.90	0.89	mg/kg dry	SW-846 6010	3/16/12	PJC
Selenium	<2	2	mg/kg dry	SW-846 6010	3/16/12	PJC
Silver	<0.89	0.89	mg/kg dry	SW-846 6010	3/16/12	PJC
Thallium	<2.2	2.2	mg/kg dry	SW-846 6010	3/16/12	PJC
Zinc	23	1.8	mg/kg dry	SW-846 6010	3/16/12	PJC

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 003

**SAMPLE DESCRIPTION:** 3) 0-4" COMPOSITE FILTER SOIL**SAMPLE TYPE:** COMPOSITE**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Benzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Bromobenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Bromo-chloromethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Bromo-dichloromethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Bromoform	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Bromo-methane	<0.31	0.31	mg/kg dry	5035/8260B	3/15/12	KAC
n-Butylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Sec-butylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
tert-Butylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Carbon Tetrachloride	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Chlorobenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Chloroethane	<0.31	0.31	mg/kg dry	5035/8260B	3/15/12	KAC
Chloroform	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Chloro-methane	<0.31	0.31	mg/kg dry	5035/8260B	3/15/12	KAC
2-Chlorotoluene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
4-Chlorotoluene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Dibromo-chloromethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dibromo-3-Chloropropane	<0.12	0.12	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dibromoethane(EDB)	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Dibromo-methane	<0.12	0.12	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dichloro-benzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,3-Dichloro-benzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,4-Dichloro-benzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Dichloro-difluoromethane	<0.31	0.31	mg/kg dry	5035/8260B	3/15/12	KAC
1,1-Dichloro-ethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dichloro-ethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,1-Dichloro-ethene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
cis-1,2-Dichloro-ethene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
trans-1,2-Dichloro-ethylene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dichloro-propane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,3-Dichloro-propane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
2,2-Dichloro-propane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,1-Dichloro-propene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Ethylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Hexachlorobutadiene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 003

**SAMPLE DESCRIPTION:** 3) 0-4" COMPOSITE FILTER SOIL**SAMPLE TYPE:** COMPOSITE**SAMPLE DATE/TIME:** 3/12/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
Isopropylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
p-Isopropyltoluene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Methylene Chloride	<0.19	0.19	mg/kg dry	5035/8260B	3/15/12	KAC
n-Propylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Naphthalene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Styrene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,1,2-Tetrachloroethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,2,2-Tetrachloroethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Tetrachloroethene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Toluene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,3-Trichlorobenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,4-Trichlorobenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,1-Trichloroethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,2-Trichloroethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Trichloroethene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Trichlorofluoromethane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,3-Trichloropropane	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,4-Trimethylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
1,3,5-Trimethylbenzene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Vinyl Chloride	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
o-Xylene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
m,p-Xylene	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<0.06	0.06	mg/kg dry	5035/8260B	3/15/12	KAC
2-Butanone(MEK)	<0.62	0.62	mg/kg dry	5035/8260B	3/15/12	KAC
Surrogates			RANGE	5035/8260B	3/15/12	KAC
Dibromofluoromethane	109		70-130%	5035/8260B	3/15/12	KAC
Toluene-d8	102		70-130%	5035/8260B	3/15/12	KAC
4-Bromofluorobenzene	96		70-130%	5035/8260B	3/15/12	KAC
1,2 Dichloroethane-d4	97		70-130%	5035/8260B	3/15/12	KAC
Moisture	15		%	SM2540 G.	3/15/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 004

**SAMPLE DESCRIPTION:** 3) 4-10" COMPOSITE FILTER SOIL

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Benzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Bromobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Bromoform	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Bromomethane	<0.23	0.23	mg/kg dry	5035/8260B	3/15/12	KAC
n-Butylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Sec-butylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
tert-Butylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Carbon Tetrachloride	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Chlorobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Chloroethane	<0.23	0.23	mg/kg dry	5035/8260B	3/15/12	KAC
Chloroform	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Chloromethane	<0.23	0.23	mg/kg dry	5035/8260B	3/15/12	KAC
2-Chlorotoluene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
4-Chlorotoluene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Dibromochloromethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dibromo-3-Chloropropane	<0.09	0.09	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dibromoethane(EDB)	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Dibromomethane	<0.09	0.09	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dichlorobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,3-Dichlorobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,4-Dichlorobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Dichlorodifluoromethane	<0.23	0.23	mg/kg dry	5035/8260B	3/15/12	KAC
1,1-Dichloroethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dichloroethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,1-Dichloroethene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
cis-1,2-Dichloroethene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
trans-1,2-Dichloroethylene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2-Dichloropropane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,3-Dichloropropane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
2,2-Dichloropropane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,1-Dichloropropene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Ethylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Hexachlorobutadiene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/12/12

Work Order #: 1203-04966

PROJECT# 110829 PROV. WATER AUTH SCITUATE

Sample # 004

**SAMPLE DESCRIPTION:** 3) 4-10" COMPOSITE FILTER SOIL**SAMPLE TYPE:** COMPOSITE**SAMPLE DATE/TIME:** 3/12/2012

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
Isopropylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
p-Isopropyltoluene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Methylene Chloride	<0.15	0.15	mg/kg dry	5035/8260B	3/15/12	KAC
n-Propylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Naphthalene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Styrene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,1,2-Tetrachloroethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,2,2-Tetrachloroethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Tetrachloroethene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Toluene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,3-Trichlorobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,4-Trichlorobenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,1-Trichloroethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,1,2-Trichloroethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Trichloroethene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Trichlorofluoromethane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,3-Trichloropropane	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,2,4-Trimethylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
1,3,5-Trimethylbenzene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Vinyl Chloride	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
o-Xylene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
m,p-Xylene	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
Methyl Tertiary Butyl Ether (MTBE)	<0.05	0.05	mg/kg dry	5035/8260B	3/15/12	KAC
2-Butanone(MEK)	<0.50	0.50	mg/kg dry	5035/8260B	3/15/12	KAC
Surrogates		RANGE		5035/8260B	3/15/12	KAC
DibromoFluoromethane	102	70-130%		5035/8260B	3/15/12	KAC
Toluene-d8	106	70-130%		5035/8260B	3/15/12	KAC
4-Bromofluorobenzene	99	70-130%		5035/8260B	3/15/12	KAC
1,2 Dichloroethane-d4	94	70-130%		5035/8260B	3/15/12	KAC
Moisture	12	%		SM2540 G.	3/15/12	BJK

Project# 110829

Prov. Water Authority Scituate

# R.I. ANALYTICAL

Specialists in Environmental Services

## CHAIN OF CUSTODY RECORD

41 Illinois Avenue Warwick, RI 02888-3007	131 Coolidge St., Suite 105 Hudson, MA 01749-1331
Date Collected: 3/12/12	Time Collected: 10:00 AM
Field Sample Identification (1) Fiberglass from Blg 0-Yards (2) Fiberglass from Blg 4-Yards	
Matrix Code M Preservative Code P Grab or Composite # of Containers & Type C	
8260 VOC's 13 Pint Bottles PAH's PPES Surface Soil	
Add'l Info: No notes Qualitative Env & Quantitative	

Client Information		Project Information	
Company Name: RIRI (CAM)	Project Name: Gov. Water Audit Schedule	P.O. Number:	Project Number: 110829
Address: 41 Illinois Ave	Report To: CAM	Phone:	Fax
City / State / Zip: Warwick, RI 02888	Sampled By: JMW	Email report to these addresses:	
Telephone:	Quote No:		
Contact Person:			
Retired/Issued By/Signatures	Date: 3/12/12	Time: 1440	Received By Signatures
<i>[Signature]</i>			
Project Comments			
Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement QC Package? Yes No Note - Analysis Samples are Green Kid Samples Continue with analysis.			
Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MgOH, N=NHO, NP=None, S=H2SO4, SB=NaHSO4, SH=NaOH, T=Na2SiO3, Z=ZnOAC Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=Void: 103-04466 Page 1 of 1			
<input checked="" type="checkbox"/> Lab Use Only		<input type="checkbox"/> Sample Pick-Up Only <input type="checkbox"/> RIAL sampled; attach field hours <input checked="" type="checkbox"/> Shipped on ice	
<input type="checkbox"/> Normal		<input type="checkbox"/> EMAIL Report <input type="checkbox"/> 5 Business days. Possible surcharge <input checked="" type="checkbox"/> Rush - Date Due: 3/14/12	
Workorder No: 103-04466			

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-04966  
**Date:** 3/20/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
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**Method 5035/8260B**

Benzene	mg/kg dry	<0.050	3/15/2012
Bromobenzene	mg/kg dry	<0.050	3/15/2012
Bromochloromethane	mg/kg dry	<0.050	3/15/2012
Bromodichloromethane	mg/kg dry	<0.050	3/15/2012
Bromoform	mg/kg dry	<0.050	3/15/2012
Bromomethane	mg/kg dry	<0.25	3/15/2012
n-Butylbenzene	mg/kg dry	<0.050	3/15/2012
Sec-butylbenzene	mg/kg dry	<0.050	3/15/2012
tert-Butylbenzene	mg/kg dry	<0.050	3/15/2012
Carbon Tetrachloride	mg/kg dry	<0.050	3/15/2012
Chlorobenzene	mg/kg dry	<0.050	3/15/2012
Chloroethane	mg/kg dry	<0.25	3/15/2012
Chloroform	mg/kg dry	<0.050	3/15/2012
Chloromethane	mg/kg dry	<0.25	3/15/2012
2-Chlorotoluene	mg/kg dry	<0.050	3/15/2012
4-Chlorotoluene	mg/kg dry	<0.050	3/15/2012
Dibromochloromethane	mg/kg dry	<0.050	3/15/2012
1,2-Dibromo-3-Chloropropane	mg/kg dry	<0.10	3/15/2012
1,2-Dibromoethane(EDB)	mg/kg dry	<0.050	3/15/2012
Dibromomethane	mg/kg dry	<0.10	3/15/2012
1,2-Dichlorobenzene	mg/kg dry	<0.050	3/15/2012
1,3-Dichlorobenzene	mg/kg dry	<0.050	3/15/2012
1,4-Dichlorobenzene	mg/kg dry	<0.050	3/15/2012
Dichlorodifluoromethane	mg/kg dry	<0.25	3/15/2012
1,1-Dichloroethane	mg/kg dry	<0.050	3/15/2012
1,2-Dichloroethane	mg/kg dry	<0.050	3/15/2012
1,1-Dichloroethene	mg/kg dry	<0.050	3/15/2012
cis-1,2-Dichloroethene	mg/kg dry	<0.050	3/15/2012
trans-1,2-Dichloroethylene	mg/kg dry	<0.050	3/15/2012
1,2-Dichloropropane	mg/kg dry	<0.050	3/15/2012
1,3-Dichloropropane	mg/kg dry	<0.050	3/15/2012
2,2-Dichloropropane	mg/kg dry	<0.050	3/15/2012
1,1-Dichloropropene	mg/kg dry	<0.050	3/15/2012
Ethylbenzene	mg/kg dry	<0.050	3/15/2012
Hexachlorobutadiene	mg/kg dry	<0.050	3/15/2012
Isopropylbenzene	mg/kg dry	<0.050	3/15/2012
p-Isopropyltoluene	mg/kg dry	<0.050	3/15/2012
Methylene Chloride	mg/kg dry	<0.150	3/15/2012
n-Propylbenzene	mg/kg dry	<0.050	3/15/2012
Naphthalene	mg/kg dry	<0.050	3/15/2012
Styrene	mg/kg dry	<0.050	3/15/2012
1,1,1,2-Tetrachloroethane	mg/kg dry	<0.050	3/15/2012
1,1,2,2-Tetrachloroethane	mg/kg dry	<0.050	3/15/2012
Tetrachloroethene	mg/kg dry	<0.050	3/15/2012

**Client:** R.I. Analytical (EAM Division)

**WO #:** 1203-04966

**Date:** 3/20/12

Toluene	mg/kg dry	<0.050	3/15/2012
1,2,3-Trichlorobenzene	mg/kg dry	<0.050	3/15/2012
1,2,4-Trichlorobenzene	mg/kg dry	<0.050	3/15/2012
1,1,1-Trichloroethane	mg/kg dry	<0.050	3/15/2012
1,1,2-Trichloroethane	mg/kg dry	<0.050	3/15/2012
Trichloroethene	mg/kg dry	<0.050	3/15/2012
Trichlorofluoromethane	mg/kg dry	<0.050	3/15/2012
1,2,3-Trichloropropane	mg/kg dry	<0.050	3/15/2012
1,2,4-Trimethylbenzene	mg/kg dry	<0.050	3/15/2012
1,3,5-Trimethylbenzene	mg/kg dry	<0.050	3/15/2012
Vinyl Chloride	mg/kg dry	<0.050	3/15/2012
o-Xylene	mg/kg dry	<0.050	3/15/2012
m,p-Xylene	mg/kg dry	<0.050	3/15/2012
MTBE	mg/kg dry	<0.050	3/15/2012
2-Butanone(MEK)	mg/kg dry	<0.50	3/15/2012
<b>Surrogates</b>	RANGE		3/15/2012
Dibromofluoromethane	70-130%	109	3/15/2012
Toluene-d8	70-130%	103	3/15/2012
4-Bromofluorobenzene	70-130%	96	3/15/2012
1,2 Dichloroethane-d4	70-130%	99	3/15/2012
<b>Metals</b>			
Antimony	mg/kg dry	<5.00	3/16/2012
Arsenic	mg/kg dry	<2.5	3/16/2012
Beryllium	mg/kg dry	<0.050	3/16/2012
Cadmium	mg/kg dry	<0.25	3/16/2012
Chromium	mg/kg dry	<1.5	3/16/2012
Copper	mg/kg dry	<2.5	3/16/2012
Lead	mg/kg dry	<2.0	3/16/2012
Nickel	mg/kg dry	<1.0	3/16/2012
Selenium	mg/kg dry	<2	3/16/2012
Silver	mg/kg dry	<1.0	3/16/2012
Thallium	mg/kg dry	<2.5	3/16/2012
Zinc	mg/kg dry	<2.0	3/16/2012
Mercury	mg/kg dry	<0.10	3/16/2012
<b>Reactivity</b>			
Sulfide reactivity	mg/kg	<2.5	3/15/2012
Cyanide Reactivity	mg/kg	<0.10	3/15/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>Method 5035/8260B</b>					
Benzene	mg/kg dry	2.5	2.1	84	3/15/2012
Bromobenzene	mg/kg dry	2.5	2.1	84	3/15/2012
Bromochloromethane	mg/kg dry	2.5	2.3	92	3/15/2012
Bromodichloromethane	mg/kg dry	2.5	2.3	92	3/15/2012
Bromoform	mg/kg dry	2.5	2.5	100	3/15/2012
Bromomethane	mg/kg dry	2.5	2.1	84	3/15/2012
n-Butylbenzene	mg/kg dry	2.5	2.1	84	3/15/2012
Sec-butylbenzene	mg/kg dry	2.5	2.5	100	3/15/2012

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-04966  
**Date:** 3/20/12

tert-Butylbenzene	mg/kg dry	2.5	2.5	100	3/15/2012
Carbon Tetrachloride	mg/kg dry	2.5	2.5	100	3/15/2012
Chlorobenzene	mg/kg dry	2.5	2.0	80	3/15/2012
Chloroethane	mg/kg dry	2.5	2.1	84	3/15/2012
Chloform	mg/kg dry	2.5	2.5	100	3/15/2012
Chlormethane	mg/kg dry	2.5	2.1	84	3/15/2012
2-Chlorotoluene	mg/kg dry	2.5	2.3	92	3/15/2012
4-Chlorotoluene	mg/kg dry	2.5	2.3	92	3/15/2012
Dibromochloromethane	mg/kg dry	2.5	2.5	100	3/15/2012
1,2-Dibromo-3-Chloropropane	mg/kg dry	2.5	2.3	92	3/15/2012
1,2-Dibromoethane(EDB)	mg/kg dry	2.5	2.1	84	3/15/2012
Dibromomethane	mg/kg dry	2.5	2.2	88	3/15/2012
1,2-Dichlorobenzene	mg/kg dry	2.5	2.1	84	3/15/2012
1,3-Dichlorobenzene	mg/kg dry	2.5	2.0	80	3/15/2012
1,4-Dichlorobenzene	mg/kg dry	2.5	2.0	80	3/15/2012
Dichlorodifluoromethane	mg/kg dry	2.5	2.5	100	3/15/2012
1,1-Dichloroethane	mg/kg dry	2.5	2.3	92	3/15/2012
1,2-Dichloroethane	mg/kg dry	2.5	2.4	96	3/15/2012
1,1-Dichloroethene	mg/kg dry	2.5	2.2	88	3/15/2012
cis-1,2-Dichloroethene	mg/kg dry	2.5	2.3	92	3/15/2012
trans-1,2-Dichloroethylene	mg/kg dry	2.5	2.2	88	3/15/2012
1,2-Dichloropropene	mg/kg dry	2.5	2.1	84	3/15/2012
1,3-Dichloropropene	mg/kg dry	2.5	2.3	92	3/15/2012
2,2-Dichloropropene	mg/kg dry	2.5	2.4	96	3/15/2012
1,1-Dichloropropene	mg/kg dry	2.5	2.0	80	3/15/2012
Ethylbenzene	mg/kg dry	2.5	2.1	84	3/15/2012
Hexachlorobutadiene	mg/kg dry	2.5	1.9	76	3/15/2012
Isopropylbenzene	mg/kg dry	2.5	2.4	96	3/15/2012
p-Isopropyltoluene	mg/kg dry	2.5	2.5	100	3/15/2012
Methylene Chloride	mg/kg dry	2.5	2.5	100	3/15/2012
n-Propylbenzene	mg/kg dry	2.5	2.3	92	3/15/2012
Naphthalene	mg/kg dry	5.0	2.0	40	3/15/2012
Styrene	mg/kg dry	2.5	2.2	88	3/15/2012
1,1,1,2-Tetrachloroethane	mg/kg dry	2.5	2.1	84	3/15/2012
1,1,2,2-Tetrachloroethane	mg/kg dry	2.5	2.1	84	3/15/2012
Tetrachloroethene	mg/kg dry	2.5	2.2	88	3/15/2012
Toluene	mg/kg dry	2.5	2.1	84	3/15/2012
1,2,3-Trichlorobenzene	mg/kg dry	2.5	1.9	76	3/15/2012
1,2,4-Trichlorobenzene	mg/kg dry	2.5	2.0	80	3/15/2012
1,1,1-Trichloroethane	mg/kg dry	2.5	2.4	96	3/15/2012
1,1,2-Trichloroethane	mg/kg dry	2.5	2.1	84	3/15/2012
Trichloroethene	mg/kg dry	2.5	2.1	84	3/15/2012
Trichlorofluoromethane	mg/kg dry	2.5	2.3	92	3/15/2012
1,2,3-Trichloropropane	mg/kg dry	2.5	2.4	96	3/15/2012
1,2,4-Trimethylbenzene	mg/kg dry	2.5	2.5	100	3/15/2012
1,3,5-Trimethylbenzene	mg/kg dry	2.5	2.4	96	3/15/2012
Vinyl Chloride	mg/kg dry	2.5	2.1	84	3/15/2012
o-Xylene	mg/kg dry	2.5	2.2	88	3/15/2012
m,p-Xylene	mg/kg dry	5.0	4.3	86	3/15/2012
MTBE	mg/kg dry	2.5	2.3	92	3/15/2012
2-Butanone(MEK)	mg/kg dry	25	23	92	3/15/2012
<b>Surrogates</b>	RANGE				3/15/2012

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-04966  
**Date:** 3/20/12

Dibromofluoromethane	70-130%		107	3/15/2012
Toluene-d8	70-130%		106	3/15/2012
4-Bromofluorobenzene	70-130%		107	3/15/2012
1,2 Dichloroethane-d4	70-130%		98	3/15/2012
Benzene	mg/kg dry	2.5	2.1	84
Bromobenzene	mg/kg dry	2.5	2.1	84
Bromochloromethane	mg/kg dry	2.5	2.1	84
Bromodichloromethane	mg/kg dry	2.5	2.2	88
Bromoform	mg/kg dry	2.5	2.4	96
Bromomethane	mg/kg dry	2.5	2.1	84
n-Butylbenzene	mg/kg dry	2.5	2.2	88
Sec-butylbenzene	mg/kg dry	2.5	2.3	92
tert-Butylbenzene	mg/kg dry	2.5	2.4	96
Carbon Tetrachloride	mg/kg dry	2.5	2.3	92
Chlorobenzene	mg/kg dry	2.5	2.0	80
Chloroethane	mg/kg dry	2.5	2.2	88
Chloroform	mg/kg dry	2.5	2.4	96
Chloromethane	mg/kg dry	2.5	2.5	100
2-Chlorotoluene	mg/kg dry	2.5	2.2	88
4-Chlorotoluene	mg/kg dry	2.5	2.2	88
Dibromochloromethane	mg/kg dry	2.5	2.4	96
1,2-Dibromo-3-Chloropropane	mg/kg dry	2.5	2.2	88
1,2-Dibromoethane(EDB)	mg/kg dry	2.5	2.1	84
Dibromomethane	mg/kg dry	2.5	2.1	84
1,2-Dichlorobenzene	mg/kg dry	2.5	2.1	84
1,3-Dichlorobenzene	mg/kg dry	2.5	2.0	80
1,4-Dichlorobenzene	mg/kg dry	2.5	2.0	80
Dichlorodifluoromethane	mg/kg dry	2.5	2.5	100
1,1-Dichloroethane	mg/kg dry	2.5	2.2	88
1,2-Dichloroethane	mg/kg dry	2.5	2.3	92
1,1-Dichloroethene	mg/kg dry	2.5	2.3	92
cis-1,2-Dichloroethene	mg/kg dry	2.5	2.0	80
trans-1,2-Dichloroethylene	mg/kg dry	2.5	2.2	88
1,2-Dichloropropane	mg/kg dry	2.5	2.0	80
1,3-Dichloropropane	mg/kg dry	2.5	2.2	88
2,2-Dichloropropane	mg/kg dry	2.5	2.1	84
1,1-Dichloropropene	mg/kg dry	2.5	2.0	80
Ethylbenzene	mg/kg dry	2.5	2.0	80
Hexachlorobutadiene	mg/kg dry	2.5	1.9	76
Isopropylbenzene	mg/kg dry	2.5	2.3	92
p-Isopropyltoluene	mg/kg dry	2.5	2.4	96
Methylene Chloride	mg/kg dry	2.5	2.6	104
n-Propylbenzene	mg/kg dry	2.5	2.2	88
Naphthalene	mg/kg dry	5.0	2.0	40
Styrene	mg/kg dry	2.5	2.1	84
1,1,1,2-Tetrachloroethane	mg/kg dry	2.5	2.1	84
1,1,2,2-Tetrachloroethane	mg/kg dry	2.5	2.1	84
Tetrachloroethene	mg/kg dry	2.5	2.1	84
Toluene	mg/kg dry	2.5	2.0	80
1,2,3-Trichlorobenzene	mg/kg dry	2.5	1.9	76
1,2,4-Trichlorobenzene	mg/kg dry	2.5	2.0	80
1,1,1-Trichloroethane	mg/kg dry	2.5	2.3	92

**Client:** R.I. Analytical (EAM Division)

WO #: 1203-04966

Date: 3/20/12

1,1,2-Trichloroethane	mg/kg dry	2.5	2.1	84	3/15/2012
Trichloroethene	mg/kg dry	2.5	2.0	80	3/15/2012
Trichlorofluoromethane	mg/kg dry	2.5	2.2	88	3/15/2012
1,2,3-Trichloropropane	mg/kg dry	2.5	2.3	92	3/15/2012
1,2,4-Trimethylbenzene	mg/kg dry	2.5	2.3	92	3/15/2012
1,3,5-Trimethylbenzene	mg/kg dry	2.5	2.3	92	3/15/2012
Vinyl Chloride	mg/kg dry	2.5	2.5	100	3/15/2012
o-Xylene	mg/kg dry	2.5	2.2	88	3/15/2012
m,p-Xylene	mg/kg dry	5.0	4.3	86	3/15/2012
MTBE	mg/kg dry	2.5	2.3	92	3/15/2012
2-Butanone(MEK)	mg/kg dry	25	23	92	3/15/2012
<b>Surrogates</b>	RANGE				3/15/2012
Dibromofluoromethane	70-130%		104		3/15/2012
Toluene-d8	70-130%		103		3/15/2012
4-Bromofluorobenzene	70-130%		102		3/15/2012
1,2 Dichloroethane-d4	70-130%		100		3/15/2012

Metals

Antimony	mg/kg dry	45.7	97.6	214
Arsenic	mg/kg dry	271	320	118
Beryllium	mg/kg dry	46.6	47	101
Cadmium	mg/kg dry	44.3	44	99
Chromium	mg/kg dry	154	160	104
Copper	mg/kg dry	279	290	104
Lead	mg/kg dry	90.3	92	102
Nickel	mg/kg dry	138	140	101
Selenium	mg/kg dry	117	120	103
Silver	mg/kg dry	39.3	41	104
Thallium	mg/kg dry	136	130	96
Zinc	mg/kg dry	588	570	97
Antimony	mg/kg dry	45.7	105	230
Arsenic	mg/kg dry	271	320	118
Beryllium	mg/kg dry	46.6	46	99
Cadmium	mg/kg dry	44.3	44	99
Chromium	mg/kg dry	154	160	104
Copper	mg/kg dry	279	300	108
Lead	mg/kg dry	90.3	92	102
Nickel	mg/kg dry	138	140	101
Selenium	mg/kg dry	117	120	103
Silver	mg/kg dry	39.3	41	104
Thallium	mg/kg dry	136	130	96
Zinc	mg/kg dry	588	570	97
Mercury	mg/kg dry	20	19	95
Mercury	mg/kg dry	20	19	95

### **Reactivity**

Sulfide reactivity mg/kg 4.00 3.57 89 3/15/2012  
 Cyanide Reactivity mg/kg 2.00 1.66 83 3/15/2012

### **-Duplicate Sample Results-**

Parameter	Units	Sample #	Rep 1 Conc.	Rep 2 Conc.	Mean Conc.	Reported Value	% RPD	Date Analyzed
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**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-04966  
**Date:** 3/20/12

**Metals**

Mercury	mg/kg dry	1203-04966-002	<0.089	<0.089	<0.089	<0.089	9	3/16/2012
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**Reactivity**

Sulfide reactivity	mg/kg	1203-04966-002	<2.5	<2.5	<2.5	<2.5	0	3/15/2012
Cyanide Reactivity	mg/kg	1203-04966-002	<0.10	<0.10	<0.10	<0.10	0	3/15/2012

**-Matrix Spike Results-**

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
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**Metals**

Mercury	mg/kg dry	1203-04966-002	<0.089	0.40	0.41	98	3/16/2012
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**Reactivity**

Sulfide reactivity	mg/kg	1203-04966-002	<2.5	10.00	6.17	61.7	3/15/2012
Cyanide Reactivity	mg/kg	1203-04966-002	<0.10	2.00	1.85	92.5	3/15/2012



## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 3/13/12  
**Date Reported:** 3/21/12  
**P.O. #:** 110829  
**Work Order #:** 1203-05145

---

**DESCRIPTION:** PROJECT #110829 PROV. WATER AUTHORITY

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

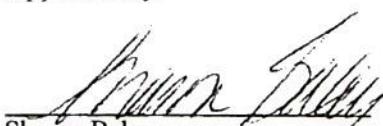
Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/13/12

Work Order #: 1203-05145

PROJECT #110829 PROV. WATER AUTHORITY

Sample # 001

**SAMPLE DESCRIPTION:** 1: SE PANEL CAULK ABOVE WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<110	110	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1221	<110	110	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1232	<110	110	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1242	<110	110	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1248	<110	110	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1254	<110	110	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1260	2500	110	mg/kg	SW-846 8082	3/20/12	JEB
Surrogate			RANGE	SW-846 8082	3/20/12	JEB
Tetrachloro-m-xylene (TCMX)	78		30-150%	SW-846 8082	3/16/12	JEB
Decachlorobiphenyl	83		30-150%	SW-846 8082	3/16/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	n/a		%	SM2540 G.	3/16/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 2: CENTER EAST ABOVE WNDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.6	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1221	<0.6	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1232	<0.6	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1242	<0.6	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1248	<0.6	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1254	<0.6	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1260	6.9	0.6	mg/kg	SW-846 8082	3/20/12	JEB
Surrogate			RANGE	SW-846 8082	3/20/12	JEB
Tetrachloro-m-xylene (TCMX)	107		30-150%	SW-846 8082	3/20/12	JEB
Decachlorobiphenyl	65		30-150%	SW-846 8082	3/20/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	n/a		%	SM2540 G.	3/16/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/13/12

Work Order #: 1203-05145

PROJECT #110829 PROV. WATER AUTHORITY

Sample # 003  
**SAMPLE DESCRIPTION:** 3: NE ABOVE WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.4	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1221	<0.4	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1232	<0.4	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1242	1.0	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1248	<0.4	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1254	<0.4	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1260	0.4	0.4	mg/kg	SW-846 8082	3/20/12	JEB
Surrogate			RANGE	SW-846 8082	3/20/12	JEB
Tetrachloro-m-xylene (TCMX)	93		30-150%	SW-846 8082	3/20/12	JEB
Decachlorobiphenyl	52		30-150%	SW-846 8082	3/20/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	n/a		%	SM2540 G.	3/16/12	BJK

Sample # 004  
**SAMPLE DESCRIPTION:** 4: SW PANEL CAULK ABOVE WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<43	43	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1221	<43	43	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1232	<43	43	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1242	<43	43	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1248	<43	43	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1254	<43	43	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1260	440	43	mg/kg	SW-846 8082	3/20/12	JEB
Surrogate			RANGE	SW-846 8082	3/20/12	JEB
Tetrachloro-m-xylene (TCMX)	94		30-150%	SW-846 8082	3/16/12	JEB
Decachlorobiphenyl	39		30-150%	SW-846 8082	3/16/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	n/a		%	SM2540 G.	3/16/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/13/12

Work Order #: 1203-05145

PROJECT #110829 PROV. WATER AUTHORITY

Sample # 005

**SAMPLE DESCRIPTION:** 5: CENTER WEST ABOVE WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<60	60	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1221	<60	60	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1232	<60	60	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1242	<60	60	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1248	<60	60	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1254	<60	60	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1260	540	60	mg/kg	SW-846 8082	3/20/12	JEB
Surrogate			RANGE	SW-846 8082	3/20/12	JEB
Tetrachloro-m-xylene (TCMX)	96		30-150%	SW-846 8082	3/16/12	JEB
Decachlorobiphenyl	44		30-150%	SW-846 8082	3/16/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	n/a		%	SM2540 G.	3/16/12	BJK

Sample # 006

**SAMPLE DESCRIPTION:** 6: NW ABOVE WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1221	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1232	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1242	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1248	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1254	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Aroclor-1260	<0.3	0.3	mg/kg	SW-846 8082	3/20/12	JEB
Surrogate			RANGE	SW-846 8082	3/20/12	JEB
Tetrachloro-m-xylene (TCMX)	88		30-150%	SW-846 8082	3/20/12	JEB
Decachlorobiphenyl	44		30-150%	SW-846 8082	3/20/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	n/a		%	SM2540 G.	3/16/12	BJK

Project# 110829

Prov. Water Authority

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-05145  
**Date:** 3/21/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	3/16/2012
Aroclor-1221	mg/kg dry	<0.1	3/16/2012
Aroclor-1232	mg/kg dry	<0.1	3/16/2012
Aroclor-1242	mg/kg dry	<0.1	3/16/2012
Aroclor-1248	mg/kg dry	<0.1	3/16/2012
Aroclor-1254	mg/kg dry	<0.1	3/16/2012
Aroclor-1260	mg/kg dry	<0.1	3/16/2012
<b>Surrogate</b>			
Tetrachloro-m-xylene (TCMX)	RANGE		3/16/2012
	30-150%	85	3/16/2012
Decachlorobiphenyl	30-150%	78	3/16/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.265	80	3/16/2012
Aroclor-1260	mg/kg dry	0.33	0.286	87	3/16/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE				3/16/2012
	30-150%		88		3/16/2012
Decachlorobiphenyl	30-150%		87		3/16/2012





## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

**Date Received:** 3/13/12  
**Date Reported:** 3/20/12  
**Date Revised:** 03/22/2012  
**P.O. #:** 110829  
**Work Order #:** 1203-05146

---

**DESCRIPTION:** PROJECT #110829

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

**Reference:** All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analysis shall not be reproduced except in full, without written approval of R. I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read "Sharon Baker".

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/13/12

Work Order #: 1203-05146

PROJECT #110829

Sample # 001

**SAMPLE DESCRIPTION:** 01: CONCRETE PAD COMPOSITE DRIP LINE

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1260	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Surrogate			RANGE	SW-846 8082	3/16/12	JEB
Tetrachloro-m-xylene (TCMX)	81		30-150%	SW-846 8082	3/16/12	JEB
Decachlorobiphenyl	84		30-150%	SW-846 8082	3/16/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	3		%	SM2540 G.	3/16/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 02: CONCRETE FOUNDATION NW

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1260	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Surrogate			RANGE	SW-846 8082	3/16/12	JEB
Tetrachloro-m-xylene (TCMX)	84		30-150%	SW-846 8082	3/16/12	JEB
Decachlorobiphenyl	75		30-150%	SW-846 8082	3/16/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	4		%	SM2540 G.	3/16/12	BJK

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/13/12

Work Order #: 1203-05146

PROJECT #110829

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Sample # 003

**SAMPLE DESCRIPTION:** 03: CONCRETE FOUNDATION WEST UNDER PANEL @ FILTER #10

**SAMPLE TYPE:** COMPOSITE

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1221	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1232	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1242	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1248	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1254	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1260	<0.5	0.5	mg/kg dry	SW-846 8082	3/16/12	JEB
Surrogate			RANGE	SW-846 8082	3/16/12	JEB
Tetrachloro-m-xylene (TCMX)	81		30-150%	SW-846 8082	3/16/12	JEB
Decachlorobiphenyl	74		30-150%	SW-846 8082	3/16/12	JEB
Extraction date	Extracted			SW846 3540	3/15/12	BJK
Moisture	2		%	SM2540 G.	3/16/12	BJK

Project# 110829

**Client:** R.I. Analytical (EAM Division)  
**WO #:** 1203-05146  
**Date:** 3/20/12

**-Method Blanks Results-**

Parameter	Units	Results	Date Analyzed
<b>PCB'S</b>			
Aroclor-1016	mg/kg dry	<0.1	3/16/2012
Aroclor-1221	mg/kg dry	<0.1	3/16/2012
Aroclor-1232	mg/kg dry	<0.1	3/16/2012
Aroclor-1242	mg/kg dry	<0.1	3/16/2012
Aroclor-1248	mg/kg dry	<0.1	3/16/2012
Aroclor-1254	mg/kg dry	<0.1	3/16/2012
Aroclor-1260	mg/kg dry	<0.1	3/16/2012
<b>Surrogate</b>			
Tetrachloro-m-xylene (TCMX)	RANGE	81	3/16/2012
Decachlorobiphenyl	30-150%	74	3/16/2012

**-Laboratory Control Standard-**

Parameter	Units	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
<b>PCB'S</b>					
Aroclor-1016	mg/kg dry	0.33	0.265	80	3/16/2012
Aroclor-1260	mg/kg dry	0.33	0.286	87	3/16/2012
<b>Surrogate</b>					
Tetrachloro-m-xylene (TCMX)	RANGE		88	3/16/2012	
Decachlorobiphenyl	30-150%		87	3/16/2012	





## CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division)  
Attn: Mr. Joseph Lepore  
41 Illinois Avenue  
Warwick, RI 02888

Date Received: 3/13/12  
Date Reported: 3/20/12  
P.O. #: 110829  
Work Order #: 1203-05148

---

**DESCRIPTION:** PROJECT #110829 PROV. WATER AUTHORITY

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.  
The Certificate of Analytsis shall not be reproduced except in full, without written approval of R.I. Analytical.  
Results relate only to samples submitted to the laboratory for analysis.  
Test results are not blank corrected.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

A handwritten signature in black ink, appearing to read 'Sharon Baker'.

Sharon Baker  
MIS / Data Reporting Manager

enc: Chain of Custody

**R.I. Analytical Laboratories, Inc.**  
**CERTIFICATE OF ANALYSIS**

R.I. Analytical (EAM Division)

Date Received: 3/13/12

Work Order #: 1203-05148

PROJECT #110829 PROV. WATER AUTHORITY

Sample # 001

**SAMPLE DESCRIPTION:** 01: CONNECTOR BLDG PANEL CAULK

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<43	43	mg/kg	SW-846 8082	3/16/12	JEB
Aroclor-1221	<43	43	mg/kg	SW-846 8082	3/16/12	JEB
Aroclor-1232	<43	43	mg/kg	SW-846 8082	3/16/12	JEB
Aroclor-1242	<43	43	mg/kg	SW-846 8082	3/16/12	JEB
Aroclor-1248	<43	43	mg/kg	SW-846 8082	3/16/12	JEB
Aroclor-1254	<43	43	mg/kg	SW-846 8082	3/16/12	JEB
Aroclor-1260	960	86	mg/kg	SW-846 8082	3/16/12	JEB
Surrogate			RANGE	SW-846 8082	3/16/12	JEB
Tetrachloro-m-xylene (TCMX)	87		30-150%	SW-846 8082	3/15/12	JEB
Decachlorobiphenyl	72		30-150%	SW-846 8082	3/15/12	JEB
Extraction date	Extracted			SW846 3540	3/14/12	THP
Moisture	N/A		%	SM2540 G.	3/15/12	BJK

Sample # 002

**SAMPLE DESCRIPTION:** 02A: COURTYARD PANEL CAULK SIDE OF WINDOW

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/12/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PCB						
Aroclor-1016	<25	25	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1221	<25	25	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1232	<25	25	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1242	<25	25	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1248	<25	25	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1254	<25	25	mg/kg dry	SW-846 8082	3/16/12	JEB
Aroclor-1260	570	50	mg/kg dry	SW-846 8082	3/16/12	JEB
Surrogate			RANGE	SW-846 8082	3/16/12	JEB
Tetrachloro-m-xylene (TCMX)	77		30-150%	SW-846 8082	3/15/12	JEB
Decachlorobiphenyl	48		30-150%	SW-846 8082	3/15/12	JEB
Extraction date	Extracted			SW846 3540	3/14/12	THP
Moisture	2		%	SM2540 G.	3/15/12	BJK